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DOMINANT THEMES
OF
MODERN PHILOSOPHY

A History

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THE JOHNS HOPKINS UNIVERSITY

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To

ARTHUR O. LOVEJOY

Clarum et venerabile nomen gentibus

Preface

PROSPECTIVE readers of a book have a right to know what they are invited to read, and few titles nowadays are so apt that they indicate with precision what a book is about. In the old days the title page of this volume would have read about as follows, with appropriate spacing and changes of type-face: *Dominant Themes of Modern Philosophy,* being a Selection of those Philosophic Ideas which the Author believes to have recurred since the Fifteenth Century in Occidental Thought, as well as some which have established New Traditions, no attempt having been made to include all philosophers usually mentioned, if only briefly, in such works and little regard having been paid to traditional prejudices, the whole based upon a re-reading of Original Sources and the Whims of the Author.

Yet even so cumbersome a title would not have explained everything which makes this book what it is. In the first place, I do not believe that it is possible to write a history of philosophy which is not a history of philosophic problems. The word "philosophy," like the words "chemistry," "physics," or any other name for an intellectual discipline, is a label for a group of problems and traditional answers to them. A history of physics will be a history of how certain problems usually studied by physicists arose and were answered and of the methods employed to answer them. And a history of philosophy must be an account of how certain specific philosophic problems arose and of how they were answered. The selection of the problems is always a matter of the historian's interests and knowledge, and I can make no claim to having done more than select those which appear to me, after teaching the subject for thirty-five years, to stand out as the most frequently recurring questions or the most influential answers.

Consequently, the book cannot be used as a philosophical dictionary in which all names are listed in an index and in which, by referring to the proper pages, one can discover what any philosopher may have stood for. A great many names which appear in the textbooks will not be found in this book, and a number of names do appear here which would not be found in more orthodox treatments of the subjects. Again, no attempt has been made to give complete accounts of what each philosopher had to say, to expound what is called his system, when he had a system. We are dealing here with philosophic themes, not with systems. Furthermore, I am not quarreling with the ideas which are presented here, but trying to understand them and to set them down in such a fashion that the reader will sympathize with them. I have assumed that the men whose ideas I have considered worthy of exposition were at least as sane as I am and that if they believed in certain ideas, those ideas seemed sound to them. I wish it had been possible to do more with the general cultural atmosphere in which these themes were developed, but in the space at my disposal that was out of the question. Similarly, biographical data had to be omitted, since only psychological data would have been relevant, and we have not enough of them to use satisfactorily. It should also be pointed out that the arrangement of philosophers and schools which has become ritualized since Hegel via Windelband has been discarded. Windelband's *History of Philosophy* is certainly one of the great books in its field, but it represents a peculiar theory of intellectual historiography with which, for reasons which I have given elsewhere, I do not agree. I have kept footnotes down to a minimum, feeling that a reader seldom looks up the references anyway and that they are annoying to have on the page. It will have to be taken on faith that the author is not misreading his sources, and there are a number of references incorporated in the text itself. Finally, I have not hesitated to organize my material as seemed reasonable to me, regardless of whether my organization would be pleasing to the general run of philosophers. This may indicate a degree of self-confidence which the book may not justify, but sooner or later a man must make up his own mind and stand on his own decisions.

Readers will no doubt be surprised at how rapidly the pace of this book increases after the chapters on Kant are ended. Much more space has been given to pre-Kantian than to post-Kantian philosophy; and when one reaches the twentieth century, the treatment of our contemporaries is, it must be admitted, sketchy. This is due to two causes, lack of space and a feeling on my part that such men are fairly well known to anyone likely to read this history. It was desirable to indicate the general direction of philosophy in our times, but it was not necessary to go into great detail in doing so. This has meant that several movements, such as neo-realism, critical realism, logical positivism, philosophical analysis, and above all, Neo-Thomism, have been passed over sometimes without even a word of comment. But one has to decide what is new in a subject whose history one is writing, and though revivals are themselves new, what is revived obviously is not. As for those movements which are not revivals, I must take full responsibility for neglecting them, consoling myself with the thought that I have thus left work for others to do. Since 1900, a number of revolutionary ideas have arisen, not only in philosophy, but also in natural science, the arts, and mathematics. The historian of the future will probably see the First World War as the beginning of a new period in occidental culture, but what will seem important to him is beyond my powers of prophecy.

This Preface should not end without a word of thanks to my colleagues at The Johns Hopkins University, Drs. Edelstein, Hammond, Lowe, and Price, as well as to my friend and collaborator, Dr. A. O. Lovejoy. Their help in this work was often given without their knowing it, for when one is in constant association with fertile and generous minds, one is every day enlightened and stimulated. I wish that they could find more of their own ideas in this book than they are likely to find in it, for nothing would please me more than to have them recognize it as their combined production. But unhappily, none of them will accept all of it though all of them will be gracious enough to accept some of it. Special thanks are owing to Dr. Jacob Loewenberg for hints dropped by the way in conversations during the last forty years and in the too few articles which have come from his pen. And particular gratitude must be expressed to Mrs. Frederick Monroe, who showed extraordinary skill in deciphering my manuscript, and to Mrs. Stuart Paynter, who kept my office running smoothly while I was buried in things remote from terrestrial occupations.

G.B.

Baltimore
January, 1957

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Introduction

WHATEVER may be true of Thales, our first recorded philosopher, all others of whom we have any knowledge begin their reflections by commenting on the works of their predecessors. Plato would be nonexistent were it not for his master, Socrates, and his opponents, the Sophists. Aristotle took over bodily much that had been previously expressed by Plato and indeed is so dependent upon his teacher that some historians still dispute how far he departed from his doctrines. When one comes to the Middle Ages this is still more obvious. One can easily trace certain ideas from John Scotus Erigena through St. Anselm to St. Thomas Aquinas; one can trace others from Roscellinus through Abelard to St. Bonaventura, through Duns Scotus to William of Occam. In fact, one could envision the history of philosophy as a continuous dialogue, with argument, rebuttal, counterargument, rejoinder, and no conclusion. Consequently the periodizing of philosophy is even more artificial than the periodizing of political history. It is as difficult to assign termini to the periods as it is to establish what might be called their lateral frontiers.

Does then modern philosophy begin in 1453 with the Fall of Constantinople and the consequent migration of the Eastern scholars into the West? But we know that some of the same scholars went westward years before the great capital of the Eastern Empire fell. We know also that thanks to the Crusades intellectual communication with the East began much earlier than the fourteenth century, and indeed if we are thinking that the introduction of new learning and new texts into the Occident marked the beginning of modernity, we had best date it from the coming of the Saracens into Spain. For the debt of St. Thomas to Maimonides is acknowledged by all, and the debt of Maimonides to his Moslem teachers is equally acknowledged. And if we postpone the beginning of modernity to the time of Francis Bacon, then we overlook the contributions of the Italians to Bacon's ways of thinking. Some have maintained that we ought to begin with Descartes, which makes modernity still later. But we know now, if we did not suspect earlier, that Descartes' debt to the Scholastics was much greater than he ever admitted. Each man, each date, each book seems equally faulty as the beginning of our times, and yet there are, in spite of all arguments to the contrary, certain historical events which set off modernity from the Middle Ages by the very fact of their startling novelty. The century between 1450 and 1550 is as full of discovery and invention as that between 1850 and 1950. The latter saw the publication of the *Origin of Species, Das Kapital,* and *Ulysses,* the development of Marxism into a political contribution, a revolution in the art of painting running from Cézanne through Mondrian, the special and general theories of relativity, nuclear physics and its applications, psychoanalysis, and the two world wars. But the former century saw the conquest of the Eastern Empire by the Turks, the invention of printing, the discovery of the Americas and the circumnavigation of the globe, the publication of the Copernican theory, and the rediscovery of antiquity through excavation and the revival of learning, to say nothing of the Protestant Reformation. Now each of these periods clearly grew out of its predecessor, and one could state in some detail how its characteristic novelties could not have been produced without the work of scores of men who probably had no idea of what their labors would result in. We can see the seeds of Copernicanism in Nicolaus of Cusa; of the early printers in inventors of block books; of the great explorations in the lesser explorations of Prince Henry the Navigator and his Italian predecessors running back to the Carthaginian Hanno if one wishes; of Luther in the Lollards and Hussites, the Cathari, Albigenses, and Waldenses. This is a game at which any historian can play. But the point is that what we call the Renaissance was characterized not by one or two novelties in certain limited fields, but by a sheaf of novelties which in combination changed men's minds. There was, for instance, in the twelfth century a sort of Renaissance in that certain men began reading certain of the Classical authors; but the rediscovery of these authors, limited, to be sure, in number, was not accompanied by discoveries and inventions in other fields, revolutions in religion, and a general reorientation of thought. The fifteenth century Italian was not simply a man who was to read Plato and Plotinus in the original Greek; he was also a man who was to learn of lands beyond the great ocean inhabited by men who seemed to have no genealogical affiliation with the race of Adam and Eve, to find learning within the covers of a printed book, easily transmitted from hand to hand, and not too expensive for the average man to buy. He was to see the great aesthetic revolution in his own country between the time of Giotto to the time of Caravaggio. When one realizes what took place during the lifetime of Michelangelo (1475–1564), one also realizes that no alert mind could have existed during that period and not have questioned traditional beliefs, including those concerning Revelation. Neither fire nor imprisonment nor excommunication nor ridicule prevented these men from continuing on their paths of exploration. Whether one is interested in the history of the arts or of science or of philosophy, one is immediately struck by the daring, the almost foolhardy daring of these people.

But so much is pretty vague, for we are pointing to attitudes, ways of thinking, fashions of belief. If we were asked to state as specifically as possible what the Italian Renaissance contributed to philosophy, we should answer a set of problems.

To begin with, we could say without too much exaggeration that it raised the problem of authority. The doctrine that the truth is established by authority was originally limited to religious truth. The Decretal of Pope St. Gelasius *(De recipiendis et non recipiendis libris),* published in 495, lists those works which were authoritative at that time. They included the Bible, certain of the early Fathers of the Latin Church, and those of the Eastern "who do not deviate from the teachings of the Roman Church," the epistolary decretals of the Popes, the acts of the holy martyrs, and certain lives of the Fathers and hermits. This decretal is not a definition of policy but simply a list of books and authors. Similarly in 553 in the second Council of Constantinople, the Fifth Oecumenical Council according to Church reckoning, no definition of authority is given, but probably no one in the councils of the Church thought there was any need for definition. For if certain doctrines were revealed by God and passed on to man through Christ and His Apostles, handed down from generation to generation in what was called tradition, then surely there could neither be doubt of their truth nor credence in anything which contradicted them.[1] One might, of course, raise the question of what actually was revealed and precisely what the Fathers meant, of who were the Fathers who were faithful to these teachings, and of what doctrines not in the Bible or the other writings listed by St. Gelasius were not harmonious with Revelation. And it was precisely such questions which the men of the fifteenth and sixteenth centuries were to raise.

But the question of authority in the early history of the Church had to do only with religious or, if one prefers, theological matters. Nowhere is there any question of what could or could not be believed about purely secular problems. But by the fourteenth century the Church has extended its authority beyond what seemed like the teachings of the Bible and the Fathers even to those non-Christians such as Aristotle. At one time he was condemned, at another permitted. But what has Aristotle to do with Christianity? His psychology might of course, and indeed did, have implications of interest to Christians. But was there any religious reason to follow him in other matters? Again, when St. Thomas Aquinas ventured into the fields of politics and biology, could one maintain that his teachings were consonant—or discordant—with the doctrines of the Church? Yet one of the errors of Nicolaus of Autrecourt, damned and publicly revoked in 1348, was that though no absolute certainty could be had of things through their "natural appearances," yet a modicum of certainty could be had "if men would turn their minds to things and not to the thought of Aristotle and the commentator," i.e., Averroës.[2] The writer of this book has probably already revealed himself as no expert in Church doctrine and practice, but surely common sense would seem to see in these words the establishment of Aristotle and his Commentator as of greater authority than the direct study of nature. Assuming that our intellectual ancestors were as sincere as we are, we may conclude that their revolt against the principle of authority began when that principle was extended to knowledge of the natural world.

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[1] The Latin texts of the ideas referred to can be conveniently found in Denzinger's *Enchiridion,* 164 *et seq.* and 212. Readers who are interested should consult the index to this book under the entry *"Auctoritas."*

Whether that is historically true or not, it is clear that some propositions cannot be proved but must be accepted as the premises from which we deduce all others. A factual statement is not true because someone says it is true. We all recognize that there are people who know more than we do about certain subjects, and we are accustomed to relying on their say-so when we wish to find out something about that subject. Thus we go to telephone books to discover telephone numbers and to almanacs to look up tables of the tides. We refer to dictionaries and encyclopedias constantly for names and dates and spellings and definitions. But all this information is about matters of fact. And we are likely to recognize the fallibility of such sources of information and we hold their statements to be on trial, as it were, until they are disproved or superseded. Thus we do not give the opinions of anyone as evidence of fact. Such opinions are simply the cause of our belief in the facts. Moreover, there happen to be certain facts of which we ourselves are the best judges. If I see a certain color, and you do not, there is no authority higher than I to whom I may appeal to settle the problem of what I see. My direct experience becomes authoritative for me at least, if for no one else. Now if natural knowledge, that is, factual knowledge about the natural, in distinction to the supernatural, world arises entirely from direct experience, then what has authority to say in the matter? If Aristotle says something which contradicts my own experience in questions to which experience is relevant, then clearly I would seem to have a right to reject his experience and stick to my own.

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[2] Students who have no objections to reading opinions which have been condemned should consult J. R. Weinberg, *Nicolaus of Autrecourt* (Princeton: Princeton University Press, 1948) for a full account of the philosophy of this interesting fourteenth-century figure.

But knowledge is, to be sure, more complicated than the reception of sensory impressions. These impressions at a minimum have to be organized into certain classes, which are represented in ordinary speech by our common nouns and adjectives. *Cat, dog, tree, cloud, red, loud, sweet,* are words which are not the names of single dated and spatially localized impressions; they are names of groups of things and qualities. Is there some authority which tells us how to make our groupings? Is this authority, in the cases mentioned, other than traditional usage? The child grows up in an environment in which his parents and siblings, then his schoolteachers and schoolmates, tell him what words to use. The tagging of things and qualities with names is not factual knowledge, but the classifications which may—and usually do—have scientific relevance are knowledge. It would, of course, be foolish to ask whether the object before me is really a dog or a mammal or a vertebrate or a terrestrial animal or a household pet, for it may be all of these things. The class in which it will be grouped obviously depends on what we are talking about. Hence in this matter authority is tradition or, if one prefers, convention. The common nouns and adjectives, however, cannot be applied unless one goes beyond one's immediate experience.

But only babies remain within the domain of such simple identifications. Most of us ask questions involving explanation. We want to know why certain events take place. The word "why" has had several meanings of which two have been peculiarly important in the history of philosophy. One is, "What purpose is achieved by the occurrence?" and the other is, "What is the cause of the occurrence?" When rain is falling and we ask *why,* we may mean, "What good does it do to rain?" or "What made it rain?" both of which phrases are admittedly inelegant. If the question then arises of which of these meanings is the correct one, we shall be ultimately reduced to an assumption about scientific method. And there, whether we are aware of it or not, we shall be relying on the principle of authority. A sophisticated person would probably realize that he was accepting one or the other of these modes of explanation not because he had reasoned out its justification, but because he was operating within a tradition over which he had had very little control. But he still would not think, one hopes, that the tradition could not be questioned. Moreover, we often want to go beyond the special occurrence with which we are confronted and ask not "Why did it rain today?" but "Why does it ever rain?" Here "rain" is not simply the name of the class of things that happen to us, but the name of a larger class of things which seemingly have no date or place. Most science rises to these larger classifications and, when we are interested in this type of knowledge, our own experience is so limited that we have to develop methods of generalization which will not only eliminate the personal equation, but also the human equation. And it will be found upon investigation that part of the method consists in fitting the type of occurrence which is before us into a whole body of scientific knowledge of which we have little acquaintance. Thus rainfall becomes a form of condensation of water vapor and is no different in the long run from what happens when one's breath condenses on a windowpane. But to recognize this is to transcend experience and represent it by a set of logical symbols linked together by the laws of consistency. Faced with such complexity, which is the outgrowth of centuries of elaboration, a work which was made by scores of men and not by one, it is understandable that the notion that Aristotle or any other single person constituted authority was bound to be rejected.

The second of the problems which the Renaissance developed and passed on to its future arose from the rejection of the principle of authority. It was the problem of the grounds for truth. If we have only to consult Revelation to find out what to believe, there is no serious problem. But there appeared, as we have said, to be questions which were not treated in the Bible and the writings of the Fathers. What then is the correct method for setting up those premises out of which we may deduce true conclusions? The search for the right method preoccupied not only sixteenth-century Italians but also Englishmen of the following century, and of course the French. The methods arrived at varied. In a man like Telesio sensory perception was sufficient. In Bacon, as we shall see, a more complicated method was set up. In Descartes dialectical analysis alone would do to reach the indubitable. But all these thinkers and their fellows saw no need to go beyond the natural capacities of the human mind to reach the truth. Most of them believed that what Bacon called the "Idols of the Theatre" were the great stumbling block to intellectual progress. And many of them also believed that any individual man unaided by co-operation could reach the truth. There seemed to be a common faculty, called by several names, but corresponding to what the medieval philosophers, and Descartes also, called the natural light *(lumen naturale),* which could not err. By the time of such philosophers as Voltaire and his opponent Rousseau, this resulted in what might be termed intellectual equalitarianism, according to which it would appear that every man was equally endowed with at least the capacity for knowledge. One might require instruction in methodology, but once that instruction was given and absorbed, the pupil was on his own. In the beginning of the nineteenth century, a reaction set in and the Catholic philosophers of France maintained that tradition, which was a social matter, alone was able to reach the truth. Though it is not our purpose to argue with the men whose doctrines we are expounding, it would seem clear that knowledge is neither exclusively individual nor exclusively social. Experience is, to be sure, something centered in an individual mind; it is acquired by an individual; it is limited by the individual's perceptual equipment, by what he reads, by his general education. A man who has never performed a chemical experiment, nor made physical measurements, nor tried to decipher an ancient manuscript, nor looked through a telescope, a man who is deaf or color blind or otherwise abnormal, cannot be said to have had the same types of experiences as others. But even the perfectly equipped individual depends on society for his language, his modes of organizing and rationalizing his experience, his method of interpreting what he experiences. To cut off an individual's mind from what might be called the social mind, both that of his own times and that of his forefathers', is impossible. And this does not apply merely to those experiences of which we approve and disapprove, experiences in which we feel self-approval and guilt, but also to those which seem to be purely factual. The very problems which we set out to solve are usually formulated by others, and nothing shows this more vividly than the history of science and philosophy. Even in so random a curiosity as that of Gilbert White of Selbourne one sees that questions are put to him by others and that he does not simply walk about in his garden asking spontaneously generated questions of the natural world.

In studying epistemology one has to distinguish between the logical analysis of that knowledge which is already in our possession and formulated in books and articles, knowledge which has already been proved and accepted, and the genesis of knowledge within the mind of a single individual. It is obvious that one can take any declarative sentence, whether it be a geometrical theorem or the everyday observation that the sun is shining, and without regard to the facts in the case interpret it as a complex of psychological data. If one isolates such propositions from their total complex, then one has colors, shapes, quantities, empirical measurements, sounds related together by perceptual relations. A mathematician would howl with dismay at the idea that the Pythagorean theorem could be demonstrated by perception, by the application of rulers and compasses, by the sight of squares. For he would maintain that he is not talking about a right triangle which is drawn on paper, but about any right triangle of any size and within the limits of right triangles of any shape. And no one has ever seen or measured with ruler and compass "any" triangle. A person can experience perceptually only certain given triangles. The passage from a particular, perceived triangle to any triangle cannot be made within the experience of any person since no one person has seen all triangles. But similarly if one takes a more modest situation such as the perception of the sun, what one perceives and how one is to formulate what one perceives are not determined within the confines of any single person's experience. Experience has a temporal dimension; it involves learning as well as direct apprehension. But one can learn only by asking questions, and we have also to learn what questions to ask. The authoritarian was likely to maintain that all possible questions had already been asked and, what is more, answered. To try to answer them for oneself would be madness.

A third set of problems also arose from the rejection of authority, though here authority concerned not knowledge but behavior. For centuries people seemed to believe that all problems of conduct were solved once and for all within the framework of the Decalogue and the Sermon on the Mount. No one was so insensitive to human problems as to believe that these rules of conduct were usually followed, but all maintained that man's wickedness alone was to blame when they were not. Political problems were situated within the framework of morals; and rulers were to be judged by the same standards as their subjects. The only difference was that whereas in most cases the latter were answerable to the sovereign, the former were answerable only to God. This left the bigger problem of whether there were any power able to apply God's standards to princes. That power was sometimes believed to be in the hands of the Church, that is, the Pope. Unfortunately there was also reason to believe that Caesar and God had different, if not equal, rights. Metaphors such as that of the Two Swords were frequently brought into play to justify this. But if it were possible for a king to be wicked, then there must be some authority which could pronounce upon his wickedness. In the beginning of the fourteenth century, on November 18, 1302, to be precise, the Pope Boniface VIII issued the famous bull *Unam Sanctam,* in which he took the position that the Pope alone could decide. Since this is one of the most important documents to be published in Western Europe, it may be well to cite relevant portions. It begins by pointing out that outside the Church there is no salvation or remission of sins. Quoting the *Song of Songs,* "My dove my undefiled is but one," the Pope followed tradition in identifying the Bride as the Church, whose mystic body is Christ or God. In the Church there is but "one Lord, one faith, one baptism." The ark of Noah, which is a symbol of the Church, had but one steersman. The Church thus is one and unique and has but one head, not two, and that head is Christ and Christ's vicar, Peter, and Peter's successors. When Christ said to Peter, "Feed my sheep," He said "Mine" in general, and not "these" or "those." If then the Greeks or any others maintain that they are not under the rule of the Papacy, they deny in effect that they are among God's sheep. It is true, the bull continues, that in wielding power over men there are two swords, a spiritual and a temporal. But both are in the power of the Church. The spiritual sword is clearly to be wielded by the Church; the temporal, by kings and soldiers, but in obedience to the dictates of the Church. Spiritual power is obviously superior to temporal power and it is within its province to determine whether it is being used properly or not. If spiritual power is to be judged, its judge must be God alone, nor can it be judged by man.[3]

It was this program of Papal supremacy, which seems so reasonable in abstract form, that divided Guelf from Ghibelline, and one can see why no prince was willing to have his acts judged by anyone other than himself. There was an ancient principle of Roman law that law was what was pleasing to the sovereign; and though disputes might arise over apparent conflicts between law, natural law, and divine law, no sovereign was likely to yield any of his power if he could avoid it. We see the same dispute nowadays when nations are asked to give up their sovereignty to an international power. And when nations do yield to a higher power, such as the Hague Tribunal, it is after having consented freely to arbitrate. Since the fourteenth century was one in which the minor chieftains of the feudal system were losing power to major chiefs—a period in which we begin to see the emergence of nations such as we knew them before 1914, with rulers who were to become absolute monarchs—it was clear that the principles of *Unam Sanctam,* however logical, would be rejected. But the justification of such rejection was none too easy.

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[3] *Enchiridion.* 468 f.

One could, of course, flatly deny the spiritual supremacy of Rome. The Greeks mentioned in Boniface's bull were in that position. But Western Europe was not. If then one admitted the spiritual supremacy of Rome, one was forced to argue to the equal powers of the two swords. One could justify this by appeal to the text "Render unto Caesar the things that are Caesar's and unto God the things that are God's." For this text would seem to make a sharp distinction between the two domains. But who is to determine which things are Caesar's and which God's? It was this sort of question which lay at the bottom of scores of works written in the fourteenth century and which have had their successors in modern times. Of these the most famous is perhaps the *Defensor Pacis* of Marsilio of Padua. The law in his opinion is not the will of either the Pope or the Emperor, but of that more mythical being, the People. It is the People who determine who shall be their king and who retain the right to control and judge his acts. They are, in effect, the sovereign. But it was obvious that actually they had very little to say either about the choice of a king or about the control of his behavior. There was thus created—or continued—a split in political philosophy between what is and what ought to be. Marsilio and his successors seemed to believe that their sovereign, the People, could never err. Here it will be observed that the philosopher was once more in search of the indubitable. So that if one is willing to speak of political philosophy as a normative science, then in both normative and descriptive knowledge men wanted an authority which was not tradition.

These three sets of problems arose, as will be surmised, against a background of medieval ideas which had begun to lose their force. Of these the most pervasive is the medieval notion of the hierarchical nature of all reality. There existed in very early times three hierarchies which were distinct: the hierarchy of logical classes, the hierarchy of value, and the hierarchy of what can only be called "reality." The first would be represented in modern times by the Linnaean classification of plants and animals in phyla, classes, orders, families, genera, species, and subspecies, in order of less and less generality. In the famous Tree of Porphyry again one moves downward from Being through successive differentiations, material and immaterial, animate material and inanimate material, and so on to individuals. And, indeed, whenever we classify, we have to group individuals together into larger collections, these collections into still larger, and stop only when we lose interest or when we can go no farther. This kind of hierarchy runs upward from the more particular to the general, from the many toward the one, from the more concrete to the more abstract, but it entails nothing of either value or reality. We do not say that mammals are better than felines, canines, or bovines, nor that being a mammal is more real than being a feline or canine or bovine. But we still speak of certain values as being higher than others, as if we kept in the back of our minds a notion of the pyramidal structure of values. We speak of the "higher senses," "higher studies," "scaling the heights of learning." We ask whether tragedy is a higher form of art than comedy. We think that values which are more universal are better than those which are local or temporary. Some philosophers have fused the most abstract values, the Good, the True, and the Beautiful, into one supreme value and have attempted, though usually with little success, to arrange lesser values under these. As an example we find a textbook on moral values setting up a hierarchy running from religious values at the top down through intellectual; aesthetic; values of character—such as temperance, truthfulness, benevolence; values of association; of recreation; bodily values; down to economic values.[4] In this case I do not suppose that the author thought that the religious values included the lower values as phyla include classes, or even that the lower values possess all the characteristics of the higher as the less general logical classes possess all the characteristics of the more general. It would seem as if he were thinking that the higher values were those for the sake of which the lower existed. Thus wealth exists for the sake of health, health for the sake of play, play for the sake of sympathy and friendship, and so on to what he called the feeling of submission to the world-order, the sense of harmony and co-operation with it, faith and hope in the triumph of the good, and delight in the divine law. If this is the correct interpretation, then the hierarchy is a series of ends or purposes. As for a scale of reality, it is doubtful how many of us would be inclined to compare the adjective "real," but our fathers did so with persistence. It made sense for them to argue that some things were more real than others, just as it did for Hegel and

[4] See W. G. Everett, *Moral Values,* p. 182.

the Neo-Hegelians. There is no longer any certainty about why this was so, but one can guess that it was because the characteristics attributed to their metaphysical God, who became identified with the God of the Bible, were traits which admitted of degrees. He was one, everlasting, omniscient, and all-powerful. Since all these terms admit of degrees, one could obviously argue that some things were more like God than others. But it was also true that, as A. O. Lovejoy has shown in his *Great Chain of Being,* the cosmos was conceived of as a system of kinds of things and these kinds could be closer or more remote from their divine source. It was probably Plotinus who was most responsible for fusing the three hierarchies together, for making God, who in his writings was called "The One," the most real, the best, and the most ideal—or general—of beings. It is evident that there is no logical passage from reality to goodness or to abstractness. One cannot say that because something is real it is better than something which is unreal. An imaginary war would be better than a real one and Beethoven's quartette, Opus 132, is better than the idea of a quartette. At least, this would seem to be so, and it would certainly require some argumentation to disprove it. I am merely saying that it is not self-evident that the real is both good and general. But unless one finds it self-evident it is difficult to appreciate some of the late medieval discussions pro and con the reality of universals or the identification of God with the *ens realissimum.*

The distinction between what we above have called the metaphysical God and the religious God is the distinction between that which is ultimately real and at the same time the principle of value, the source of law, akin somehow to the human intellect, but not necessarily a person, whose existence is demonstrated by reasoning, either a first cause or a final cause or both, and a being who is definitely a person, incorporeal usually, a being to whom one can pray, who can himself love the human race, whose relation to mankind is not that of a foreign nature but that of a father and friend. The former god is exemplified in Aristotle's Prime Mover, the latter in the God of the Bible. We still find writers talking of the religious God as the *ens realissimum,* as if He were a logical class, and indeed it is difficult to see how else one can talk of Him if one is to be philosophical. For philosophical language scarcely lends itself to the outpourings of hearts in misery who are tortured with a sense of guilt, who plead for salvation, or who rejoice in their love for their Creator. In any event, when the hierarchical universe is shaken and God loses His character as a logical class, He becomes one among other beings. The change makes itself felt in the arguments in defense of nominalism which asserted that universals are simply names for groups of things and have no reality of their own. That being so, the pyramid began to totter. But at the same time a new account of knowledge was required, and also a new account of the relation of men to nature and to God.

The beginnings of this revolution in thought are to be found in the works of the Franciscans. In fact, it might with some plausibility be argued that modern empirical science begins with this group, for they were more responsible than any others for providing a motive for the observation of this world of natural objects. Anyone, from the days of Aristotle down, could have done as much, for the material lay open to common observation. But science, whether ancient or modern, is more than observation. It is the intellectual organization of what is observed. The same set of perceptions can be interpreted in a variety of ways, as we all know, and to escape from the traditional system of interpretation requires a strong impulse which is not provided by the sense organs alone. Empirical science as we know it must always be corroborated by perceptual facts; logical consistency is never enough. The question which the historian must face is that of why people began looking at the facts and for the facts. No indubitable answer can now be given to this question. But at least two factors stand out as possible answers.

First, the very life of Saint Francis showed an inclination toward the things of this world, which was novel. His very words, "my little sisters, the birds," "brother wolf," "my sisters, simple minded turtle-doves," as well as the *Canticle of Brother Sun* in its entirety, indicate a new feeling toward the natural world.[5] This feeling is by no means a philosophy, though it may have been the stimulus to a philosophy. For no one knows how philosophers get their start, why one man seems to have a natural attraction toward materialism and another toward idealism. The psychology of belief has never been thoroughly explored, but we do know that no mind is ever so "open" that any idea whatsoever will find a lodgment in it. Conviction will always be fortified by reason, but it does not begin with reasoning. For, before we start our series of deductions, we have to know what we want to prove.

In any event we find thirty years after the death of St. Francis a new General of the Order, St. Bonaventura, who elaborates a complete philosophical system in which man's interest in observation is given religious sanction. To his way of thinking, the natural world is a reflection of God's nature, the contemplation of which is the first step on the mind's journey to God. Thus physics, in the sense of interpreting natural events as functions of weight, number, and measure (*Wisdom.* 11, 21), is neither the pure acquisition of knowledge for its own sake nor the beginning of practical control over the course of events, but a religious exercise. Its value is the understanding which it gives one, not merely of the operations of Nature, but of "the power, wisdom, and immense goodness of the Creator." Similarly when one studies history, one does not simply satisfy one's curiosity about the past and future—for St. Bonaventura was as interested in the future as in the past—but one sees a divine pattern in the sequence of human events in "the ages of the Law of Nature, of Scripture, and of Grace." And, finally, while still taking this first step toward final illumination, one perceives the hierarchical order of the cosmos in the arrangement of inorganic, organic, and rational beings; of "lesser things," middle things, and best things; of the purely corporeal, corporeal and spiritual, and purely spiritual; of the mutable and corruptible, the mutable and incorruptible, the immutable and incorruptible. These divisions are by no means new, but can be traced back to Aristotle. They are clearly based upon a logical division of possibilities which are then read into the existent world. So too the hierarchical order of things was old. But the technique of studying the divisions and the order had a new emphasis, for one might say that now the observation of even the lowest stratum of the hierarchy became a religious study.

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[5] The *Canticle* may not be by St. Francis himself, but is certainly by some member of the Order.

The outcome of this was the feeling that any man could reach the truth by his own efforts. One was led up the ladder of truth through one's own studies. I do not say that the Seraphic Father saw this himself, and am indeed fairly certain that he did not. Yet it could not be denied that one of the implications of the theory was that the vision of God in the natural order was available to anyone who cared to experience it. This wisdom was based not upon the reading of a sacred text—though St. Bonaventura himself made full use of sacred texts—nor on the pronouncements of any authority. The Mind's Road to God lies open to anyone with eyes to see. One might indeed invoke here the tradition which is exemplified in the words of Pope John XIII to the effect that "God has not chosen orators and philosophers, but men without either letters or polish," [6] as His spokesmen. But this was never so powerful a tradition in Catholic Europe as its opposite, which set men to work studying, expounding, and harmonizing authorities. One can easily see the dilemma which confronted the Christian philosopher on this matter. If Christianity was to be a universal religion, its truths must be accessible to all, regardless of their intellectual attainments. But on the other hand, it maintained that certain things were true and could be demonstrated. And the demonstration of that truth demanded intellectual attainments which were not the possessions of everyone. This dilemma led to a split in opinion which was to stimulate one of the forms of Protestantism, that form which maintained that something variously called the inner light, or the Spirit speaking through the individual, or insight, or unaided conscience, could reach a knowledge of the truth without the aid of authority. If one has simply to look upon the beauty and order of the natural world to see a reflection of God's being, why should one either study the authorities or listen to the Church? The place of authority in religion thus again became a dominant problem. It began to look as if any individual man was as sound a religious authority as either tradition or the Fathers or the Church as a whole. In the thirteenth century it became the task of the Dominicans under St. Thomas Aquinas to perform a magnificent work of organization and purgation, to bind together into a single logical system the beliefs of Catholicism, to refute the usual objections to points of doctrine, and to establish on a firmer footing than had been possible before his time those writers and texts which might be considered authoritative. But at the same time as this was going on, the foundations of another philosophy were being laid which would lead to the destruction of that edifice. The Church, as is well known, in 1879 in Pope Leo XIII's encyclical *Aeterni Patris* strengthened the prestige of the Thomistic system. But in the fourteenth and fifteenth centuries it was the Franciscan tradition which steadily attracted more adherents. With Duns Scotus and William of Occam nominalism developed to the full, and nominalism often appears to be the proper philosophy for empirical science. Now if only particular things are real, certain consequences would appear to follow of which two were of special importance in the Renaissance. One was the supremacy of the will over the reason and the other was the priority of the individual not only in acquiring knowledge but also in practical matters.

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[6] For a brief sketch with illustrative documents of anti-intellectualism in the Middle Ages, see George Boas, *Essays on Primitivism and Related Ideas in the Middle Ages* (Baltimore: Johns Hopkins Press, 1948), pp. 121–28.

The relation between will and reason began as a theological problem. Readers in medieval philosophy will recall that the Thomistic philosophers maintained that God's reason ruled His will, that He did the right and good because He knew what was right and good. The followers of St. Thomas's great opponent, Duns Scotus, maintained that whatever God did was right by the very fact that He did it; His will created right and wrong just as the will of the sovereign created law. To use the customary slogans, the Thomists said that God made this world because it was good, the Scotists that it was good because He made it. Behind all this lay a clash in religious opinion which goes back to the earliest days of Christianity, one side insisting on man's absolute and unquestioning obedience to God's commandments on the grounds that self-abnegation is the greatest of virtues. Tertullian's famous "I believe because it is inept" is an expression of that attitude. Anyone, he is saying in effect, can believe that which is reasonable; but only a saint can believe the irrational. The religion of submission is neither ignoble nor unjustifiable. No religious man would say that submission to God's will should depend on our understanding of that will. From the early hermits to the Quietists of the seventeenth century, Christians have been found who have sought salvation in resignation. And what was Stoic acceptance of universal law but a recognition of man's impotence? Indeed one interpretation of the sin of Adam was our primordial ancestor's desire to know, a kind of pride which alienated him from his Creator. But the Scotist position was not simple assertion. For, as we know, reason cannot operate without classes of things, universals. An individual, a single particular which is unique, is a logical surd. One can look at it, perceive it, feel it, act upon it; but one cannot discuss it logically, for no common noun or adjective can describe it. Nothing can be deduced from its simple being. It can be given only a proper name and, insofar as it is an individual thing, its nature is unintelligible. A proper name is as uninformative about the nature of what it labels as a baggage check or an empty sound. When we talk about things, we have to resort to classifiers. Thus a name like Abraham Lincoln simply points to an individual; it tells one nothing about him. Rational action about this individual can be undertaken only when something is said or known about him. And what is said or known will be inevitably phrased in terms of classifiers: "Abraham Lincoln freed the slaves," "Abraham Lincoln was the sixteenth president of the United States," "Abraham Lincoln was assassinated," etc.

One can see then that since God is absolutely unique, there can be had no rational knowledge of Him. One may resort to analogical reasoning, but no analogy is secure unless one knows both terms involved. And by hypothesis one does not know one of these terms. But one can love and obey an individual without having knowledge of him. We do not wait for scientific information about those whom we love before we grant them our affections, nor do we first have to understand what and why we desire before we desire. All that is required for action is apprehension. We must at least see or hear or taste or smell or touch before we desire and act, and if sensory apprehension is missing we can also supplant it by imagination. Thus if an individual is confronted with another individual and both are by definition unique, knowledge or reasoning becomes impossible. Yet action is still possible and the will—nonrationally—can accept or reject the unique object with which it is confronted. So if one of the two beings is God and the other the fruit of His creation, He might "see that it was good," but there would be no sense in saying that He had reasoned to its goodness. For if there were some rational ground for its being good, there ought to be some possibility of other choices which might have been made of other worlds, all of which with this world also would form a class of similar worlds. Since theologians usually think of God as immutable, they cannot conceive of His shifting from the consideration of the other possibilities to this actuality. A volition which follows from one's own nature can, of course, be frustrated by reason when we have reached the point of wisdom through experience. But we have to have had experience of a class of similar experiences in order to learn anything from it. But without any previous experience, such a desire seems to attempt to fulfill itself automatically. The primacy of God's will then could be defended not merely on faith, but on excellent epistemological grounds. The fundamental problem is integrated into that of the very nature of the universe.

The development of Franciscan philosophy led to the assertion that only individuals existed. Duns Scotus had laid great emphasis upon individuation as arising not from matter, which was the Thomistic view, but from the very form of a thing. Its "thisness" *(haecceitas)* was inherent in it, not conferred upon it. Thus a given thing was not simply a member of a class—a frog, a maple tree, a specimen of carbon; it was this or that frog, this or that maple tree, this or that lump of coal. In that case classes were made by human beings, following, to be sure, the order of nature but not prior to the order of nature. In logical realism of the extreme form, only the universals were real; its problem was to explain the existence of particulars. In nominalism as it was developed by Scotus's successor, William of Occam, only the individual things were real; universals were to be explained as our contribution to knowledge. It is easy to see why this philosophy appealed to men of the fourteenth and fifteenth centuries. These men were no longer so much worried by purely metaphysical questions, such as the ontological status of *The Church,* inherited guilt, and vicarious atonement, all of which seemed to be explicable on the assumption of logical realism. They were more interested in such questions as man's relation to God, moral problems involving ways of living. This was specially true after the Black Death, which reached its height in the middle of the fourteenth century. Whether this horrible scourge was the cause or not, one begins to find at this time an efflorescence of divers heresies extolling moral perfection and the expression of humility in the most exaggerated forms. The tendency was growing to conceive of man's relation to God in terms of a personal relationship which seemed to make the existence of the Church unnecessary.[7] But we have already seen that according to Boniface VIII there was no salvation outside the Church. But what if the Church is simply a collection of individuals, a name for a social, but not mystically united, gathering? The individualistic and anti-authoritarian philosophic movements of the Italian Renaissance were preceded by popular religious movements which all were successively condemned: the Beguines and Beghards in 1311, the Fraticelli in 1317, Marsilio of Padua and John of Jandun in 1327, Meister Eckhardt in 1329, the Armenians about 1340, Nicolaus of Autrecourt in 1348, Denis Soulechat in 1368, Wycliffe and Hus in 1418. It would appear to an historian that few periods of this length produced so many unorthodox ideas. And it was precisely many of these errors which were developed into full-fledged philosophies in Renaissance Italy.

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[7] For an account of the expression of this tendency in painting, see Millard Meiss, *Painting in Florence and Siena After the Black Death* (Princeton: Princeton University Press, 1951).

CHAPTER 1

The Rejection of Authority

MODERN philosophy in Italy may be said to have arisen toward the end of the fifteenth century. Two distinct currents of thought may be untangled from the great variety: that which rejects authority for a closer description of fact as discovered by the philosopher's own investigations, and that which flows from a close study of Platonic and Neo-Platonic texts, rather than from Aristotelian and Christian tradition. We shall discuss the former of these two sets of ideas first. It is clear that within the limits of a single volume many, and not the least interesting, thinkers will have to be omitted or passed over with but a word or two. But we hope at any rate to treat properly those men whose contribution to our times was most important.

1. MACHIAVELLI

It will, of course, be observed that all authority cannot be dismissed if one is in search of certainty. Somewhere, it will be believed, there must be some knowledge which is firmly established and indeed indubitable. The Italians in whom we are specially interested displaced the center of authority from tradition to the individual. They differed largely in their opinion of the kind of knowledge that was most certain and in the fields of their major interest. Thus, Machiavelli (1469–1527) took as his main field that of political philosophy, and as a political philosopher his place is rightly in a history of that subject. But in his books appear some points which are of special interest to philosophers in general, regardless of their special studies. I refer to his creation of a sovereign on the model of Scotus' God and his descriptive method.

We pointed out that Scotus' God was essentially a will whose commands determined right and wrong, and we suggested that such a God alone was capable of dealing with a world made up of individual things and events. Machiavelli's Prince also makes right and wrong. There is no power above him to sway his will nor need he use his reason except in practical matters. For Machiavelli the word "ought" is strictly instrumental. It is the "ought" which we use when we inform others of how to obtain certain results. It is an "ought" which appears in laboratory manuals, cookbooks, and in general in all treatises which describe how to go about reaching certain ends. In *The Prince* Machiavelli expounds how to be a successful ruler. He rarely mentions the legitimacy of the ends, for he seems to believe that they are beyond discussion. If the sovereign knows what he wants, and that seems to be power, then Machiavelli's book is there to tell him how to get it. No prince wishes to lose his power. The very conception of personal sovereignty is based upon the wielding of power. One may discuss, to be sure, the relative desirability of republics and monarchies, but once one has chosen to write a guidebook for princes, it is irrelevant to include the government of other forms of state.

Consequently Machiavelli is interested both in how sovereigns lose their power, or weaken it, and how they retain it. He plunges immediately into the question by pointing out that it is easier for the heir of an ancient family to maintain his position because of what he might have called, but did not, the inertia of custom. What has been going on for ages takes on an air of necessity. People will believe that a king whose ancestors have ruled over them for centuries is almost self-justified. His will has the force of common law. It is the man who rises to new power who will find the problem of retaining his position more difficult. For, once the people have become used to the idea of change, they will accept his own downfall with equanimity as simply another change. One can see the effect of custom in the United States in the matter of presidential re-elections. The Constitution originally said nothing about limiting a president's terms to two. But Washington refused a third term and it became accepted as a matter of course that his successors would do the same. The three re-elections of Franklin Roosevelt were obviously not unconstitutional, but they violated custom and seemed monstrous to some of his adversaries.

When a ruler has conquered foreign territories, he does not ask whether he has any right to them. He has them in his power and his own problem is how to keep them. Machiavelli suggests, among other things, the planting of colonies in them, dispossessing the inhabitants, who will be few and poor. The remainder of the native population will not be injured in any way and will hesitate to rise up against their new ruler for fear of being treated like the inhabitants who have been dispossessed. Men, as he says, must be either caressed or annihilated. They will revenge themselves for small injuries but are powerless to do so for great ones. Hence why not be thorough about the matter? One could of course maintain an armed garrison instead of locating colonies in conquered territories. But in that event one would have to support the garrisons, which is needlessly expensive, and which injures everyone in the land. Here again there is no discussion of the rights and wrongs of colonizing other people's countries. The right of conquest is accepted as obvious. The question is simply the retention of the territory which has been won. Where Machiavelli suspects that such acts might be questioned, he is likely simply to state that it is a natural and ordinary thing, as he does of the desire to acquire possessions. The conjunction of "natural" and "ordinary" is not accidental. For Machiavelli's way of determining what is natural is to examine history, especially ancient Roman history and contemporary Italian history, and see what behavior prevails.

It is this feature of Machiavelli's thought which has proved so distasteful to later readers. When, for instance, he is discussing the best way of governing states that lived under their own laws before being occupied, he points out that one has a choice of despoiling them, of going and living in them in person, and of allowing them to keep their own laws while paying tribute, and setting up a government of a few who will keep the country friendly. This government, having been created by the conqueror, knows that it cannot exist without his protection. This technique is that of puppet governments. Machiavelli seemed to know what we have learned to our surprise, that it is always possible to find quislings. The puppets become despised by their own people and hence are all the fiercer, we have discovered, in protecting the interests of the conquerors of their own country. When this is not the case, and it will not be, he says, when states have been used to liberty, then the conqueror must lay waste the country. But when they are not used to liberty but have lived traditionally under a prince, the conqueror must kill the ruler and will then acquire the loyalty of his new subjects who have no prince of their own and cannot unite to choose a new one. Those of us who wonder at the success of the Communists in maintaining puppet governments in power have only to recall this item.

It is thus stupid to accuse Machiavelli of hypocrisy or even of satire, if the latter is accusatory. Often a straight descriptive account of human behavior seems satirical for the simple reason that we overlook the facts for the intentions which lie behind them. Machiavelli, as is well known, was merely setting down the way princes both in the past and in his own times had succeeded in having their own way. That people were shocked may have been due not merely to their belief that their rulers were motivated by nobler aims but by their neglect of the real aims which lay open to any seeing eye. It is true that when he describes ancient usage, he has to rely on books. But when he is expounding contemporary history, his experience alone is sufficient. Were Talleyrand or Bismarck to have written a true and factual account of their negotiations, it too would have seemed so fantastic as to be satire. In fact, it still seems false to some Germans that Bismarck could have sent the famous Ems telegram. We probably find it hard to believe that we or our fathers have been fools, and we would seem to have been fools to allow ourselves to be governed by men who thought the end justified any means. We forget that in affairs of state it will be assumed that no nation will commit suicide and that the preservation of the group is a paramount interest. To Machiavelli the prince was the state. Nor did he have a satirical intention when he set forth the best means of preventing a ruler's loss of his kingdom.

There is, therefore, unless I have misread and misunderstood him, no reason to attribute hypocrisy to him. If a cookbook tells a woman how to make a chocolate cake, it does not tell her that she ought to make chocolate cakes, how often she ought to make them, for whom she ought to make them, on what occasions, or for what purposes. If the will of the sovereign, like that of God, is not subject to superior authority, we repeat, then the political philosopher must not attempt to criticize it except on the grounds of efficacy. And that is precisely what Machiavelli attempts to do. Thus when he urges a prince who has usurped power to commit all his villainies at once and get them over with, lest he have to live dagger in hand, he also argues that once the throne is seized, order should be restored, benefits conferred little by little, that they may be the better enjoyed. But the benefits and the order are not presented as terminal goods, but as instruments for the maintenance of rule. If a prince confers all his benefits at one time, the people will be disappointed when no more are forthcoming. And if order is not restored, neither harsh measures nor favors will do any good. The former will come too late; the latter will appear to have been forced from the prince.

It has not escaped the attention of the reader that Machiavelli is fully aware of the power of the governed. He sees them, too, wanting to have their own way, to fulfill their desires which they, too, will consider self-justified. If they are accustomed to liberty, they will not abandon it without a struggle. Their withdrawal of favor will mean abandonment, and it is they whom the ruler must woo by his constant protection of their interests. They are not rivals for the throne. Such rivals will be found among the nobles. The nobles therefore must be always kept under suspicion. But the populace, being the ruler's ultimate support, must be so treated that they will always and under all conditions remain faithful to him. He must make them want his rule. And this can be done only by protecting them against their enemies and giving them his friendship. And it is here that the ruler must exhibit those moral qualities which his people admire. Machiavelli points out that no one man can possess all the moral qualities, for otherwise he would not be human. What virtues he should constantly demonstrate by his acts and what he should be willing to dispense with are determined by the supreme end of maintaining his power. If certain vices would lose him the state, then he should avoid committing them. But if there are some which are necessary to save the state, then fear of scandal should not prevent his committing them. A ruler would do well to be liberal rather than niggardly; and yet if one is liberal in a modest manner, concealing his liberality, then no one will know of it and it will be ineffective. And if one is liberal ostentatiously, making a great display of one's magnificence, then it will be necessary to impose heavy taxes to pay for the show. Consequently it is better to be niggardly and run the risk of a bad name, for it will sooner or later appear that the ruler has saved enough money to pay for the defense of the state. When he is at the head of his armies and invading a hostile state, then he may indeed be liberal, for he is spending the wealth of others. Were he to spend his own money, which of course he would have acquired from his people, he would sooner or later become an object of hatred and lose the support of those whose backing is essential to his preservation. If one runs through the other virtues and vices listed by Machiavelli, one will see that in each case the effectiveness of the quality as a means of maintaining power is the final test. Since men must be ruled by fear, the ruler must be feared. It would be well if he could be also loved, but he cannot rule by love alone. For love is fickle whereas fear is constant. He has it in his power to be feared but not to be loved. And he can rely only on what is in his power. Similarly, when it is a question of keeping faith, the ruler must have both the cunning of the fox and the courage of the lion. The fox cannot protect himself from wolves, but he can avoid traps. The lion can kill the wolves, but he cannot avoid traps. Therefore a ruler must be willing to break his word when it is to his interest to do so, especially since it is always easy to find a reason for failing to fulfill a promise. The outcome of Machiavelli's discussion of the virtues and vices is that a prince need not be virtuous but must seem to be so. The appearance will be accepted as the reality by the populace, and will keep them satisfied. And the reason why one should keep them satisfied is to help in preventing rebellion.

The *Discourses on Livy* are reflections on ancient history, the details of which do not concern us here. Though their influence was never so great as that of *The Prince,* they present a more complete political philosophy in which the state is the center of interest rather than its ruler. Machiavelli here seems to be more clearly aware that the fate of the governed is a matter of some importance, not merely insofar as it affects the success of their rulers, but in itself. But in drawing his conclusions, he has to assume that political problems have an essential homogeneity, that states have a common identity whatever their individual differences may be. That he accepts the truth of Livy's account of Roman history is obvious. However critical he may be of human behavior, he is still not in a position to be critical of an ancient text. But even if he were, he would have had to have some exemplar about which to construct his argument, and the continuity of Italian history from the most ancient times to his own was no doubt sufficient justification for choosing Roman politics as that exemplar. The book is not, however, a simple discussion of antiquity. Roman history is treated as if it were contemporary history and the possibility that the problems of the times of Scipio were not identical with those of fifteenth- or sixteenth-century Italy is never faced. Again, in discussing the role of religion as an instrument in government, Machiavelli does not seem to see the great difference between a cluster of cults unorganized by an ecclesiastical hierarchy and Roman Catholicism. But this is the weakness of all political philosophies which are based on historical precedents. We can only learn from history when history repeats itself. And the fact that antiquity had rulers and the ruled is not evidence that the relations between the two were identical with those which obtained in contemporary Italy, or even highly similar to them. The analogies then are hardly close enough to be telling, but are made close by Machiavelli's imagination.

On the other hand, that the human race had certain traits which were pervasive was a fundamental assumption of the whole humanistic movement. That all men have certain basic desires or drives or instincts is undoubtedly true. But it is also true that the satisfaction of these desires is elaborately and usually rigidly controlled by the society in which they are expressed. Were Machiavelli resorting to antiquity simply because he was afraid to speak of his own contemporaries, this distortion would be understandable, if not very laudable. But, on the contrary, few men have been so outspoken about their contemporaries as he. There must then have existed in his mind an exaggerated notion of human homogeneity, a notion which was, of course, fostered by Christianity, which was a religion universal in scope and neither tribal nor local. To speak of Man in general or of Human Nature, rather than of this and that man and their individual natures, was Machiavelli's tie with tradition. Nor did he ever cut it. But submitting to the implications of this assumption might have led him to consider the interests of humanity as a whole rather than the interests of those who seek to manipulate humanity to their own individual ends. He is not above stating certain ethical dogmas—that, for instance, one's country must always be defended, that love of country should make a good citizen forget his private wrongs. Such dogmas are never defended by argument; they are simply stated. But in such statements Machiavelli overlooks the question of precisely what the country is. To all intents and purposes the country becomes identified with its ruler and his interests become paramount, just as they were in *The Prince.* The doctrine that there is a being called "The Nation," which is other than the sum or collection of people living in a given area under a given government, usually speaking the same language and believing in the same religion, a doctrine which is expressed in such terms as the *patria,* the *Vaterland, la nation,* and the like, may be justified and has certainly had beneficent results in practice. But it is also a doctrine which is far from being self-evidently true. In our own times it has been subjected to a modicum of analysis, but of that more later.

2. Pomponazzi

If the interpretation of the Bible presented difficulties to the philosophers of the Middle Ages, so did the interpretation of Aristotle, whose prestige was so great that he was frequently simply referred to as The Philosopher. The nature of the Aristotelian corpus was such that special training was required in order to understand it. The problems were not simply matters of vocabulary. The text itself is disjointed, fragmentary, often corrupt, and if one were to use

Aristotle as an unquestioned authority on matters which were of importance, then clearly it was essential that one know precisely what his opinions were. Unfortunately there were not merely several individual interpreters of his works, but also several schools of interpreters. Consequently one could not tell a student to go to the authorities in order to find out what the meaning of Aristotle's philosophy might be, for the authorities differed too widely.

Pietro Pomponazzi (1462–1525), almost a strict contemporary of Machiavelli, presented this problem in its clearest light. In his book, *A Treatise on the Immortality of the Soul,* published in 1516, he ostensibly is pointing out first that there are three different interpretations of Aristotle's ideas on immortality: that of Themistius and Averroës, that of Alexander of Aphrodisias, and that of St. Thomas Aquinas. The first of the commentators maintained that Aristotle believed the active intellect to be immortal in the sense that at death it became part of the Divine Intellect; the second, that he believed the whole soul to perish with the body; the third, that of St. Thomas, according to whom the soul is a unit, the form of the body, and is immortal. In the Preface to his book, Pomponazzi is careful to point out that he is merely interpreting Aristotle, not developing a theory of his own on the soul's immortality. He does not doubt that the Thomistic position is correct; he simply doubts that it agrees with Aristotle's. But if none of these interpretations is sound, then of what use is it to go to authority to discover what Aristotle's real opinion was? Would it not be wiser to go to the author himself? And if one does, then what will be our conclusion?

Such a program would not seem revolutionary to us, but that it was even a possibility indicates the intellectual atmosphere of the time. Are we to conclude that the method of authority was so self-justified that students automatically went to the books about books rather than to primary sources for their information? It cannot be denied that much medieval learning is second hand. Even St. Thomas himself goes to writers like Pliny and Aelian for facts about natural history. That he has recourse to the early Fathers for matters of theological interest is more understandable, for he had as one of his aims the establishment of a single and unified tradition. But the amount of simple quotation and paraphrasing of earlier writers, not for purposes of discussion but for those of determining the truth, was very great indeed, and one sometimes gets the impression that a philosopher believes something to be true simply because an authority says it is true. One can understand the importance of Pomponazzi's book only if one reads it in the light of this tradition. And its revolutionary character comes out in its author's disclaimer that he shares the opinions which he attributes to Aristotle. For that makes it appear that one must share Aristotle's opinion in this matter if one is to be orthodox. Was Aristotle, then, a father of the Church? Was one to believe, as Justin Martyr said of Socrates and Plato, that he had been illuminated by the Logos? Or was one to maintain, as Father Copleston maintains in his *History of Philosophy,* that ancient philosophy was a *praeparatio evangelica?*

Without running through Pomponazzi's arguments in detail, it suffices to say that he comes to the conclusion that Aristotle did not believe in immortality. This in itself might not have stirred up a tumult but there was good reason to believe that Pomponazzi shared the Stagirite's opinion. The thirteenth chapter of his book lists the arguments against the mortality of the soul, arguments which are not directed against Aristotle but against the idea when held by anyone. And the fourteenth then proceeds to demolish them, and again not merely by utilizing Aristotelian texts but by relying on inferences which are Pomponazzi's own. But worse than that, he then attempts to point out that whether the soul is mortal or not, man can live a virtuous life. For a virtuous life is a life lived so that each man can realize his potentialities. But no two men need have the same potentialities. Some are speculative, some practical, some given to artistry. We cannot all be philosophers or artisans, but we can all attain the kind of happiness which is reached through the perfection of our talents. "For farmer or smith, poor or rich, if he is moral, can be called happy, and is truly called so, and goes off content with his lot. In addition, even disregarding moral happiness, he can be called a happy farmer or a happy builder, if he works prosperously in agriculture or in building, although he is not so properly called happy on this account." [1] But this comes down to an acceptance of Stoic ethics rather than Aristotelian, according to which every man is an organ of the great animal which is the cosmos and must perform his function as a part of a larger whole. This entire chapter reads like a plea for arranging one's life in harmony with one's abilities, never striving for a perfection which is beyond one's attainment. It is a purely terrestrial ethics in which man's celestial life is made to appear irrelevant. When the question is raised of whether this would not reduce man to a bestial level, Pomponazzi replies that no one would prefer to be a long-lived stag than a man. But is he then basing his moral code on man's general desires? Is he saying that one can find the good by discovering what man in general seeks? If so, then it is clear that, regardless of his air of merely expounding the doctrines of Aristotle, he is setting up an ethical system which runs in opposition to that of the Church.

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[1] Translation by William Henry Hay, II, in an offset edition of the *Tractatus* issued by Haverford College in 1938, p. 46. This edition is particularly useful since it contains a facsimile of the *editio princeps.*

It was supposed by Pomponazzi that his opponents would maintain that a mortal soul might just as well live as long as possible, since he has no future life of happiness to look forward to. Against this he maintains that even the beasts on certain occasions prefer death to life. They will die to protect their mates and, in the case of the bees, their state and ruler. Yet no one imagines that they have immortal souls which make certain acts sinful. We all know that they are mortal. Moreover death, even if the soul is mortal, is preferable to life under conditions in which one's country, one's friends, or one's virtue are at stake. When one dies for one's country, one does it because such an act is right in itself and not because one's soul is immortal. Virtues, in other words, can be defined in humanistic terms and will have the same compelling power as they have when they are defined in superhuman terms. Are we always to be swayed by the anticipation of rewards and punishments? Such behavior, he insists, is reprehensible. Virtue must be estimated at its intrinsic worth and that worth does not change because of what will be gained as its reward. A man may do good without reward and is not the less virtuous but rather the more so. If, then, rewards and punishments are given us in our afterlife for what we have done in this one, then they are not to be considered as more than nonessential consequences of our behavior. This would certainly seem to put immortality in a domain which has nothing to do with virtue and vice.

Pomponazzi's conclusion is that the problem of immortality is neutral in the question of morality. But this does not entail the belief that the soul is indeed mortal, for we have the word of God that it is not. Therefore its immortality is to be accepted on faith and not by the light of natural reason. On this basis Pomponazzi is willing to assert the soul's immortality. On such a foundation all men can agree; on the foundation of reason they will be likely to disagree.

Before making up one's mind that Pomponazzi was insincere in this and merely attempting to save his skin, one should remember that even men like Pascal and Huet of Avranches were equally sceptical of rational proofs of religious dogmas. The seventeenth century was marked by philosophers who might be called pious sceptics, as we hope to point out later. The method of pious scepticism was not, however, acceptable to the Church. Pomponazzi's book was burned in Venice by order of the Doge, but he himself was unharmed.

I have not seen the decree, if it exists, which ordered the book burned, but one can easily understand why the doctrine of a twofold truth was distasteful to the Church. To teach that a doctrine might be irrational and yet acceptable was also to teach that the Church maintained irrational dogmas. But it had also been believed that man's resemblance to God lay precisely in the reason and if the reason turned out to be misleading when it directed its attention to the most important of our beliefs, then the image of God turned out to be a very faint image indeed. The distinction between the irrational and the nonrational or suprarational may be difficult, if possible, to make. But nevertheless it appeared more acceptable to the Church than the idea that truth might be twofold. Moreover the doctrine of the twofold truth could lead to abuses such as a person's maintaining the most anti-Christian notions under the guise of philosophy and at the same time maintaining their contradictories under the guise of faith. We may of course accept certain ideas as true which we ourselves have not demonstrated and which we are too ignorant to demonstrate. But that is quite another matter from maintaining that both of two contradictory propositions are true in the same sense. When we say that the world is flat to an architect and round to an astronomer we are not stating two contradictory propositions. But when we say that the soul is both mortal and immortal, then we are stating contradictory propositions. And hence if we have grounds for believing in its immortality, we are supposed to use our reasons to maintain that belief. If we fail, then we fail not because the reason proves its mortality, but because we either have no evidence of the soul's immortality, or we have used the word "immortality" in two or more senses, or because we have committed fallacies in reasoning. When, again, it is said that something might be true scientifically and false poetically, or the reverse, we are clearly using the word "true" in two different senses. But if that word is unambiguous, then clearly a statement cannot be both true and false and we may expect to suffer from asserting the contrary. We have no way now of judging Pomponazzi's sincerity, nor have we much need to. He succeeded in writing a book which demonstrated with some success that Aristotle did not believe in the immortality of the soul and that, furthermore, man could live a moral life with a soul which ceases to exist at death.

But regardless of the content of his major work, it was proof that one need not consult approved authorities to determine what an author taught; one had only to go to the author himself. This would lead, and in his case did lead, to conclusions which were not currently held. In choosing Aristotle as his target, Pomponazzi selected the one authority whose prestige was greatest and whose opinions were almost as widely accepted as those of Revelation. In the following century men were to use the same technique in reading the Bible, and there the results were to be equally upsetting.

3. Telesio

When we come to Bernardino Telesio (1509–88) we see that the rejection of authority has gone so far that we have a man maintaining that sensory perception is the final source of truth beyond which there is no other. Few men have been more celebrated in their time and few more neglected by their successors.[2] We all know that Bacon called him the first of the moderns, but what he contributed to modern philosophy is less well understood. That contribution, contained in his compendious work *De rerum natura,* first published in 1565, is not merely the setting forth of a new method of philosophizing but also the elaboration of a complete philosophy of nature based upon that method. It is the former that is of interest here.

For, by maintaining that sensory perception was sufficient for giving us premises so rich that we could deduce from them all we know on earth and all we need to know, Telesio would appear to be the initiator of the empirical method in philosophy. The empirical method requires presumably nothing more than a normal mind, a power of observation, and an ability to draw conclusions logically from what is observed. That observation requires elaborate controls, that its organization into a philosophical system requires certain fundamental patterns into which the substance of what we observe has to be arranged, that we cannot draw conclusions without some hypotheses about what we shall try to prove, do not seem to have occurred to Telesio. But since they seldom occur to more influential thinkers than he was, he may well be pardoned for the oversight. The pardon is the more deserved in that he was living in a time when philosophy was more likely to be practiced by the application of accepted rational dogmas to what might be called "the facts," than by the derivation of generalizations from the facts themselves. Thus Telesio in the first chapter of his book insists that one can discover the principles of natural philosophy only by perception and never by the reason, "as was done by the Ancients."

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[2] The best short work in English on Telesio that has come to my attention is the doctoral dissertation of Neil C. Van Deusen, *Telesio, the First of the Moderns* (New York, 1932). This work analyzes the legends about Telesio's life and summarizes his teachings with long quotations from his work.

Like Pomponazzi before him, he indicates the conflicts in opinion which are exhibited in the works of the authorities, conflicts which would never have arisen if only they had followed their senses, for the senses would exhibit the true nature of the world, a nature which is always harmonious with itself, always the same, always operating in the same way and producing the same effects. This faith in what later was to be called the uniformity of nature is never questioned by him. And yet he, too, was aware that he might conclude to opinions which were contrary to the teachings of the Church. And he makes the usual disavowal of heresy or error, a disavowal which was phrased in the traditional manner, that if he has taught anything which is contrary to the Holy Scriptures or the teachings of the Catholic Church, he rejects it. His book is simply the statement of what would result from his method.

Now, of the millions of things which one might observe if one were to begin with sensory observation, Telesio observes that the sun is made up of heat, the earth of cold—two elementary qualities which had been established as such by Aristotle. But, in opposition to Aristotle, he insists that heat is the very being of the sun, cold of the earth. The four elements—fire, air, water, and earth—are reduced thus to two, and the four pairs of elementary qualities—the hot-dry, the cold-dry, the hot-moist, and the cold-moist—are similarly reduced. Moreover both sun and earth, heat and cold, are perceptible to the senses. The world then is the product of the interplay of two opposite beings, for heat is observed to be by nature mobile, cold immobile; heat is tenuous and light, cold dense and heavy. But neither heat nor cold is corporeal, for each requires some body in which to reside, so that we can now observe three "principles." The body which is to sustain the two contrary properties takes the place of Aristotle's primary matter. It is something created by God whose inner nature is not observable by us. We know it only by its qualities. It is that which was to become material substance in the later history of philosophy, a being whose existence was required if the qualities were to be more than fleeting phenomena. The concept of an underlying substance which possessed qualities but which was not to be identified with them either individually or collectively has remained in some forms of philosophy to the present day. In the seventeenth and eighteenth centuries, it seems to have been taken for granted by many thinkers. And when it was not taken for granted its existence was asserted as an obvious necessity. At this point Telesio clearly goes beyond sensory perception. For if the material substratum cannot be observed, it is merely tautological to point out that its existence must be demonstrated by nonobservational method. But Telesio does not object to argument as such. He objects simply to rational principles which dictate to the world what it ought to be before any observations are taken. If qualities are of such a nature that their being requires a substance to possess them, then he is willing to assert the existence of the substance.

He proceeds in a similar manner when he asserts that the sum total of matter can neither be increased nor diminished. It is obvious that perception could not establish the conservation of matter, and indeed it might be argued that we actually do perceive the destruction and creation of bits of matter. Telesio might have demonstrated his point by having recourse to the ancient principle, *ex nihilo nihil,* but on the contrary seems to have relied more on the principle of sufficient reason. For he argues that since all that is produced is produced by the action of heat and cold and these are incorporeal, there would be reason to believe that the amount of matter could be altered by the action of immaterial beings. Are we then to conclude that all change takes place on the level of perception and that the world is composed of an inalterable substratum overlaid with a shifting screen of immaterial phenomena? That would indeed seem to be appropriate, but it must be confessed that such an inference would be anachronistic. Telesio does, however, note the difficulty in attributing to a single subject contradictory properties and hence points out that matter must be broken up into particles that may individually possess the qualities in question. These particles, which perform the same function as the atoms of Democritus or the corpuscles of Hobbes, are referred to simply by the name of *entities* (beings), but they are granted the power of feeling so that they will know or feel heat and cold. If they did not have this power, there would be no accounting for their interactions. For were an entity to withdraw from its position, a vacuum would be created unless another entity took its place. And the former could not withdraw nor the latter find its place unless they both possessed at least a dim feeling. (That all beings possess at least this much consciousness was an idea to be revived for different reasons by Leibniz in the following century.) The dim feeling which characterizes the primordial entities is also needed since animals who are made up of matter do have feelings, and where would the animal mind have come from if it had not previously been in the hot and cold particles which compose the total beast? The question is a ticklish one, for if the animal soul is composed of the consciousness possessed by the material particles of which the animal is made, why not the human soul as well? Telesio does conclude that the human soul is material, made up of material particles, though more tenuous than the usual entities which we find in the inanimate world. The idea that by rarefying matter to a point where it is indistinguishable from what we would call a gas, we might reach something which would replace the immaterial soul and yet not be really immaterial gained credence, no doubt, from the old idea of spirits.

The spirits which are material are not identical with the whole soul of man. There is within him another soul which is incorporeal and immortal. It is this soul which inquires into eternal and divine matters and is put into the human body by God. No animal possesses one, which explains why animals do not reason. Our kinship with the animals resides in our spirits, then, not in our immortal soul. Since it is incorporeal, it cannot be observed by our senses and obviously cannot expand and contract. Have we then any right to assert its existence? [3] Did Telesio bring it in simply to anticipate ecclesiastical objections? This is a question which no one can answer now. But the probability is that he believed in the existence of an immortal soul and did not see how a corporeal substance could know incorporeal things. But this problem ought not to arise if one was to be faithful to the method of observation initially posited. It may well be that Telesio was setting up the limits of philosophic inquiry and not asserting that Revelation was either unnecessary to man or false. It may also be true that he understood the limits of sensory observation, which he identified with philosophic method, and was merely expounding "the nature of things" as it appeared to sensation. In that case, however, it would have been more reasonable to say nothing of the supernatural at all. But it is perhaps best to seek no answer to a question which is no longer answerable.

4. CAMPANELLA

That Telesio's philosophy did not necessarily lead one into atheism or materialism is demonstrated by the opinions of his most illustrious disciple, Tommaso Campanella (1568–1639). Campanella, who entered a Dominican convent at the age of fourteen, soon tired of reading the works of the Aristotelian commentators and decided, as he says, "to read all the books of Plato, Pliny, Galen, the Stoics, and the Democriteans, and above all those of Telesio." [4]

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[3] Cf. Van Deusen, *op. cit.*, ch. iv.

[4] In view of the difficulty of obtaining many of Campanella's works in America, I am relying for many of my quotations on the edition of Alessandro d'Ancona, in two volumes (Turin, 1854), and on Eugenio Garin, *La filosofia*, II, in the *Storia dei generi letterari italiani* (Milan, 1947). The best and most complete study of Campanella that I know is Léon Blanchet's *Campanella*.

It was Telesio from whom he took the main tenets of his philosophy, Telesio, whose arrows, as he said in one of his sonnets, shot down the tyrant Aristotle. These fundamental tenets are (1) that all human knowledge is based upon sensation; (2) that we do not know the real nature of things but only their sensory appearances; and (3) that the intellect consummates the union between the knowledge which comes to us from the various senses and erects it into systematic form. But the idea that the senses bring us news only of heat and cold, of the sun and the earth has disappeared, as well it might, since Campanella was writing about sixty years later than Telesio and knew of the work of Copernicus and Galileo.

Though, as far as I know, he does not refer to St. Bonaventura, he arrives at a result which has at least logical relations to the beginnings of that writer's *The Mind's Road to God.* For he too maintains that the human mind, by contemplating the visible world, sees in it the reflection of God's mind. He begins one of his poems by saying,

> The world is the book in which the eternal Wisdom has written his own thoughts; it is the living temple in which He, depicting His acts and His own image, has adorned with living statues its depths and its heights; hence each spirit should read and contemplate herein the art and governance, lest he fall into impiety, and may say, "I fill the universe by contemplating God, the heart of all things." [5]

This is precisely a paradigm of the natural theology which may dispense with authority since the book of Nature can replace that of Revelation. For if the contemplation of the cosmos, its art and governance, is the contemplation of the eternal Wisdom, then why should a man avail himself of commentaries upon it, interpretations which are bound to be secondhand versions of what is open to all?

That the Heavens declare the glory of God and that it is possible to see, not merely to know about, His handiwork in Nature, was of course one of the principles of ancient Stoicism and in the Renaissance was restated by such men as Raimond Sebond, whose views were popularized by Montaigne, and by the English Deists. In all cases it is a view which permits men to discover the truth without recourse to others, and neither tradition nor authority is needed to bolster it. When certain Protestant sects maintained that man had only to follow his inner light or the dictates of his conscience, they were in fundamental agreement about the authority of the individual mind, if not about method. But Campanella went even farther than this. For at times he speaks as if there were no difference between God and Nature, much as his predecessor Giordano Bruno did when he used the conjunction, *Deus sive natura.* But as a matter of fact, even a superficial reading of his remaining works will show that he erred more in phraseology than in thought. Thus toward the conclusion of the *City of the Sun* we find that the inhabitants of the City of the Sun have two metaphysical principles: Being and Non-Being, of which the first is "God Supreme." They worship God in Trinity, but they also maintain that God is the greatest Power, from which proceeds the Highest Wisdom, and from the two proceeds Love. This interpretation of the doctrine of the Trinity might have been acceptable as poetry, especially since Campanella had made it clear that the Solarians, if that is the proper word to give this imaginary people, had not had the benefit of Revelation; but unfortunately Campanella had frequently addressed God as *Wisdom* in his various works. Moreover, he had placed at the head of his Utopia *Metaphysicus,* and had given him as aides Power, Wisdom, and Love. Was one to see in civil government a replica of the cosmic rule? Was metaphysics to replace religion? And in that case, was reason to take the place of faith? Such questions were not directly answered in the *Civitas solis,* but who would have failed to notice that the very title of the work echoed that of St. Augustine's *Civitas Dei*? Metaphysics, moreover, is given an absolute rule over things both temporal and spiritual, "and after his judgment has been given, all controversy must cease." He is thus above the divine Trinity, as he is above the state. Perhaps, if he had named him *Religio* or even *Ecclesiasticus,* Campanella's fate would have been different.

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[5] In Ancona, *op. cit.,* II, p. 25.

For when Campanella came to discuss civil government in his political aphorisms, or in his *Political Discourses,* he was as ultramontane as Joseph de Maistre. The Pope was obviously supreme in all matters. Kings existed to execute his orders and to execute them, if need be, by force of arms. For Campanella had little confidence either in natural goodness or in the people, that *bestia varia e grossa.*[6] The Church to him stood for wisdom; it was the representative on earth of what he so frequently called *il Senno supremo.* Consequently, it would be false to assert that he was either a pantheist or a materialist, whatever impression his metaphysical writings may make. One gathers the impression from surveying all his works which are available that he kept the two fields of philosophy and religion quite distinct and that his thought as a whole represents the twofold truth in action. Philosophically he was undoubtedly a disciple of Telesio, at least in his formative years; religiously he was a devout son of the Church. If the conflict seems irreconcilable to us, it is probably because we find it difficult to make so clean a separation between faith and reason.

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[6] See his sonnet *Della Plebe* in Ancona, I, p. 79.

But the same duality of "realms of truth" seems to have existed in his epistemology as a whole. Thus in his early years we find him writing a book entitled *Philosophy Demonstrated by the Senses.* Written under the direct influence of Telesio who, he says, was his delight *(Telesio me delectavit),* it attempted to expound a purely empirical metaphysics. Experience at this period of his life seems to have been thought of as a picture of the world, "God's book." But while asserting his fidelity to experience, he nevertheless—like Telesio for that matter—goes well beyond experience in his inferences. It will become increasingly clear, we hope, as this book progresses, that the ideal of believing in nothing but what experience tells one is impossible of achievement, for, after all, experience can only answer questions which are put to it by inquiring minds. The questions which Campanella put to it were, as all questions must be, inherited from his predecessors. Even Galileo, who prided himself on the acquisition of simple facts, was far from staying within the limits of the simple facts which he observed. As Campanella grew more mature and more independent of his master, he raised questions which he saw could not be answered by sensation. For sensations were produced in us by objects which essentially differed from us. If then we were to ask questions about the soul and God, questions which he could not resist asking while under torture, they must be answered by some source of truth adequate to their nature. He thus moved on to another theory of knowledge.

This theory had its origin in Telesio's notion that the ultimate particles of matter were dimly conscious.[7] The degrees of consciousness were seen by Campanella to vary and to form a scale running up to that of the Soul of the World, a being which it is necessary to posit, he maintains, in order to make the interaction of things intelligible. But if knowledge always arises through the impact of external things upon us, then how could we know ourselves? And if the objects external to us are only perceived when their natures differ from ours, then how could we know other men's minds, the angels, and God? Campanella thus was forced to revise his theory of knowledge and to admit that each consciousness was self-conscious. This consciousness admits us into the very heart of things and no longer limits our knowledge to their outer natures. Their outer natures are their effects upon us; their inner are their consciousness. But how explain self-knowledge—or, better, self-awareness—if all knowledge arises through the action upon us of external things which are fundamentally different from us? Happily Telesio had seen that each particle and constellation of particles must desire self-preservation and no such desire could have arisen if they were not at least obscurely self-conscious. It required only a greater emphasis upon this aspect of Telesio's theories to build up a new theory of knowledge, and of metaphysics too, which in its full expression would be the antithesis of Telesio's.

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[7] As Blanchet points out in his book *Campanella,* p. 159, Telesio hesitated to attribute consciousness to the cold particles, but Campanella has no such hesitation.

For now self-awareness becomes the cardinal point of Campanella's epistemology, as it was of Descartes'.[8] "Just as to know oneself," he says, "is essentially to be oneself, so to love oneself is to be oneself, but to know and to love oneself are distinct in origin and in relation, since self-love arises from self-knowledge." But if self-knowledge is identical with the self, then how about knowledge of other things? Obviously there must be a community of nature between what we are and what we know, and the problem of knowledge is the problem of identifying ourselves with our objects. This harks back to the ancient dispute, which Theophrastus records in his *De sensu,* about whether knowledge arises through the impact of similars or of opposites. When one asserts that knowledge is a relation between similars, one can easily develop an argument for mysticism at the conclusion of which one asserts that knowledge of God is absorption of the individual into God. One would imagine that knowledge of the beings lower in the scale of Being than God would also be absorption into them and that knowledge of Nature would be a loss of self-consciousness. But here Campanella, like many others who have followed the mystic way, appears to be so intent upon his goal that he does not see the logical difficulties of the road to that goal. Quite the contrary, knowledge of Nature is the absorption of Nature into us. For he both asserts that what we know of the external world is true, or can be true, of that world, and at the same time he also asserts that the occasion of our knowledge is always a change of ourselves into the things which we know. It is likely that he either was not aware of the obscurity of his solution or that he neglected to clarify it. Lest we seem too severe, let us restate the difficulty. If knowledge is always self-knowledge, then (1) the objects of knowledge must be absorbed into ourselves, or (2) we must be absorbed into them. In the former case, it would appear that, as the English Empiricists were going to say, we know only our own ideas. In the latter case, we lose our self-identity. The former alternative seems to be accepted by Campanella when it is a question of knowing the ordinary objects of experience, but the latter when it is a question of knowing God.

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[8] This has been clearly developed by Blanchet, *op. cit.,* and in *Les Antécédents historiques du "Je pense, donc je suis."*

The precise meaning of the identity of self-knowledge and self-existence is none too clear. The self in self-knowledge, according to Campanella, is not the object of knowledge, as an external thing might be an object of knowledge, for there is no separation between the self-as-knower and the self-as-known. So positive is Campanella of this, that he invents a new word for self-knowledge: *entitatis prae-eminentiam,* something he says which is far more divine than either action or passion. Pre-eminence of being is more divine, since God's self-knowledge must imply no separation in God's being. The Divine Mind must know itself as it is, must know itself while being itself. Self-knowledge in man must be of that sort too, otherwise one would run into the paradox of the retreating subject, a paradox of which the Post-Kantians were to make so much. We have here then two kinds of knowledge, one of which is innate, the other, namely knowledge of the external world, is acquired by "passion." [9] The discrepancy between the two sorts was to arise again in the conflict between the English Empiricists and the Platonists. But the Platonists, while emphasizing the innateness of certain of our ideas, were clearer in their exposition of what those ideas were and why they must be innate. Before he terminates his meditations on this subject, Campanella reaches the point of maintaining that because of the homogeneity of all things, we can know all things; but also that since all things are in God, our meeting with them is but the occasion of our knowing them. As Blanchet points out in his beautiful exposition of Campanella's philosophy (p. 290), this is not far from the seventeenth-century French doctrine known as Occasionalism, the doctrine whose main exponent was Malebranche.

In spite of the strong religious overtones of his philosophy, in spite of his mysticism, his belief in immortality, his ultramontane political philosophy, Campanella did not escape punishment. Twenty-seven years of his life were spent in jail and the tortures which he suffered were insufficient to make him recant. The whole horrible story is told not only by himself but also by Ancona, and its horror cannot be minimized. Fortunately in 1634 he was able to make his way to Paris where Richelieu took him under his protection. But it was not an experience to encourage other Italians to philosophize.

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[9] It is perhaps needless to point out that in this context "passion" is the correlative of "action." Campanella uses the term as Aristotle did, as the name for "what is done to us," in distinction to "that which we do."

5. BRUNO

Meanwhile there had been born and had died a philosopher whose influence in the history of modern thought was at first obscured and later exaggerated: Giordano Bruno, born in Nola about the middle of the sixteenth century and burned at the stake for heresy in 1600, after seven years in prison. One has only to compare him with a man like John Locke to see how difficult it is to reconstruct from his bombastic, florid paragraphs anything resembling a system of philosophy. Fortunately that is not the problem which we have set before us. As a heretic he must have rejected authority, and no one who has read any of his works could doubt their heretical nature. What then did he substitute for authority?[10]

The answer can only be found by an examination of his reasoning, and that his reasoning, like everyone's, starts from unproved premises is inevitable. But his premises, unlike those of earlier philosophers, do not come from the works of Aristotle, Plato, or the Pythagoreans, on whom he says all scholars are nourished, but apparently from self-evidence. And when they are stated, they are not made to harmonize by ingenious devices with those which he might have inherited from the masters. In the second of his dialogues on "The Cause, Principle, and One," he has his spokesman point out that there is a distinction between the development of a method and its application, that just as the sword maker need not know how to fence, so the methodologist need not know how to use his method. There is a distinction, he maintains, to be made between those first principles and causes which are, as it were, a revelation of God's nature, and the secondary causes which depend upon them. The source of our knowledge is God, but as God is infinite, we can know Him only by His works. But even then our knowledge of Him is imperfect, for He is so far above us and the world that we can never do more than approximate the truth about Him. Here Bruno follows a medieval tradition, whether he admits it or not, the tradition whose most obvious source is John Scotus Erigena.

In spite of the impossibility of knowing God, the philosopher must always attempt to proceed along the road to a knowledge of the divine, and that road, as in St. Bonaventura, begins with a contemplation of the natural world. Nature, then, will first show us a difference between principles and causes. The former are what one might call the necessary conditions for the existence or being of anything; the examples which Bruno gives are the beginnings of processes and the premises of an argument. Just as a seed may be the principle of a plant without germinating and becoming a plant, or a set of axioms may be stated without a mathematician's deriving any conclusions from them, so any principle may exist without any consequences following from it. Thus, he says, it is correct to speak of matter as the principle of the constitution of things, but it would be incorrect to speak of matter as the cause of things. Causes are always external to their effects, the agents which bring them into being and the purposes for which they come into being. Now all of this is as a priori as anything which the Scholastics ever propounded and, when Bruno proceeds to elaborate his argument, he does so exclusively by the dialectic method, which is more often the drawing of supposed implications out of the meanings of terms, than the observation, either controlled or uncontrolled, of natural things and events.

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[10] The best account of Bruno in English which I have found is that of Sidney Greenberg, *The Infinite in Giordano Bruno* (New York: King's Crown Press, 1950). It is particularly interesting in that it contains an excellent translation of the dialogue *Concerning the Cause, Principle, and One.*

Thus he has his spokesman announce immediately that the "universal physical efficient cause" is the universal intellect, that the universal intellect is the first and principal faculty of the Soul of the World (the Neo-Platonic *anima mundi),* and that the world soul is the universal form of the world. This amazing proposition seems to be justified, and here we are freely interpreting Bruno from what he does, not from what he says he is doing, by abstracting from the various philosophies of the Ancients an idea which he believes to be common to them all. He thus goes back beyond the Middle Ages and the philosophy of the schools to a more primitive kind of wisdom which he believes to be resident in their predecessors. But it is also interesting to observe that prominent among the absent is Aristotle. And indeed the opinions which he treats as those of the Greek philosophers are not merely those of Platonists, but those of the late Neo-Platonists, who were willing to expound the theories of Pythagoras, the Magi, and Orpheus, as they were those of Homer and Hesiod. He seems to have replaced one set of authorities by another.

His chosen authorities then tell him that just as man may through his intelligence make works of art and that works of art cannot be made without the use of our minds, so the universe and the things which occur in Nature must proceed from the operations of an intellect. But throughout the universe we find three kinds of intelligence: the divine "which is all things," the mundane "which makes all things," and the particular which "becomes all things." The divine is what in Aristotelian language would have been the form of the world; the mundane would have been its efficient cause; the particular would have been the actualities potential in individual events. This becomes clarified when we see him arguing that these particular causes are both extrinsic and intrinsic to the things which they cause. They are extrinsic since a growing thing is not what it will be until the process of growth has been terminated, and thus the cause which is fashioning it remains outside it. But they are intrinsic also because the formal cause is intrinsic to that which it forms; the formal cause remains, so to speak, within it until it is made. So Aristotle spoke of the psyche as resident within the living being, guiding its course of growth and at the same time being that which its growth would realize. Confronted with such paradoxes, the modern reader who, it may be assumed, is less friendly to mystic contradictions than was Bruno, will demand clarification. Bruno, however, as Professor A. O. Lovejoy has pointed out,[11] thought no less of an idea because of its implicit inconsistencies. He had absorbed the *docta ignorantia* of Cusa and his predecessors, according to which the nature of the cosmos as a whole, or of God, must always be expressed in inconsistent terms since it is the nature of the whole to contain both the affirmative and the negative; and, since every adjective limits the nature of that which it qualifies, one must assert of the whole of being all adjectives.

Moreover, it was typical of philosophy up to the time of Hume at least to express all action in terms of an agent and its acts. Every act must have its agent, just as every attribute must have its underlying substance which it qualifies. Thus, if one observed a plant growing, there must be something that grew which was different from the growing. This practice is in accordance with our grammatical usage; whether it arose from that or not is something which we cannot determine. In any event it lies behind much of the explanatory technique of the classic thinkers and indeed gave rise to problems which would not have arisen had these thinkers been able to think in terms of functions, rather than in terms of substances. Thus, if there were such a thing as a universe which manifested order, there must be some being which was the principle of that order; and, if the order could be formulated in terms of some pattern or form, then the pattern or form must be something apart from that to which it gave form. But, since from the days of Aristotle down, the universal principle or cause or final goal was identified with what the Judeo-Christian tradition called "God"; though the two were in many ways quite different, it was almost impossible for Bruno to describe his first principle in terms other than those used to speak of the Judeo-Christian God. There is clearly no reason to ascribe human traits to what in the last analysis is a metaphysical principle, but Bruno cannot resist the temptation to speak of it as if it were really a more perfect kind of human mind. It has pleasure and delight in evoking all sorts of forms from matter; it cannot be envious of any possibility; it must be wise and good. It is within the world as the pilot is within the ship; it governs the world as the pilot governs the ship. Just as the pilot and his ship form a unit, for neither by itself can perform its appropriate function, so the world and its soul form a unit. At times he emphasizes the inseparability of the two; at times, the distinction between them. It is the former which leads him to speak of God or Nature as if there were no difference between them, except for purposes of conversation; and it is this which could lead men to denounce him as either atheist or pantheist. But at the same time he could focus his attention upon his first principle as if it existed apart from that which it was "informing," and at such times he speaks with the tongue of an angel.

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[11] See his *The Great Chain of Being* (Cambridge: Harvard University Press, 1936), p. 120.

Whatever the shortcomings of Bruno, and they can be exasperating, he never hesitated to follow an argument where logic seemed to take it. Thus he does not evade the conclusion that if the world as a whole has a soul, then all the things in the world have souls too. To the objection that this would imply that tables, shoes, and the like are animate, he replies that, since they have both matter and form, they must have some sort of spirit within them. Moreover, how could minerals and dead roots and herbs produce any effect upon the mind of man—as they undoubtedly do when used medically—if there were not a community of nature between them and the mind? Could an entirely material thing affect a mental thing? That cause and effect must have a common nature was a principle so hallowed by tradition that it had become self-evident. It was to be used later by Spinoza in denying psychophysical interaction and by Berkeley in denying the material cause of our ideas.[12] It is doubtful whether anyone before our own time would have thought to question it. Be that as it may, Bruno accepted the principle and thus was able to arrive at the conclusion that the whole universe was animate—in varying degrees of animation—and that its unity consisted precisely in the pervasive soul which was as unchangeable as matter, and hence eternal.

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[12] In fact, it seems to lie behind the causal argument in science which Meyerson in his various works has seen as the primary formula of all scientific explanation.

It followed from this that individual souls must also be immutable and that the souls of men were, as Christianity taught, immortal. But, again in accordance with tradition, Bruno distinguishes three kinds of soul: (1) that which is never separate from its matter, and is called a "material form"; (2) that which is not extended throughout the matter to which it gives form, but activates it without becoming identified with it; (3) that which is not extended throughout its matter and is independent of it. His example of the first is fire; of the second, the vegetative and sensitive souls; of the third, the intellect. If one ask how he reaches this result, the answer is that he has taken the two terms, "dependent" and "extended," and has built up the following possible combinations of them: that which is dependent and extended, that which is dependent and inextended, that which is independent and inextended. The apparently fourth possibility, that which is independent and extended, is a contradiction in terms. This purely dialectical method permits him to give a kind of animation to all levels of being: the mineral, vegetable-animal, and human.

Another example of his dialectical method may be seen in his doctrine of matter. Matter, according to Aristotle, was the receptacle of the forms, being potentially everything but actually nothing. It was inert, simply the characterless stuff out of which everything was made or grew. But Bruno wishes to fuse the beings which are in the universe into a unity. He therefore insists that matter must somehow contain all the forms, as seeds might be said to contain plants, and as they were said to contain them only a bit later than Bruno's time by those biologists who believed in "preformationism." For if it did not contain the forms of things, how could they emerge from it? One typical answer was that the forms were ideas in the mind of God, who was thought of in this context as a great artificer who gave form to matter. But if that doctrine were held by Bruno there would be an irreconcilable duality in the universe, the duality of a creative, universal mind and the inert stuff without specific character which would be matter. Bruno simply neglects the former theory and instead cites that held "by Aristotle and his school" to the effect that the forms emerge from matter and are not put into it. Clearly, if they emerge out of it, they must have been in it, unless one wishes to violate the traditional dictum *ex nihilo nihil,* and Bruno had no such desire. But if matter is the source of all the forms, if they are contained in it and have only to develop under the influence of an efficient cause, then it would seem reasonable to believe that matter is but another name for the Soul of the World, or is the Soul of the World seen from below.

But the unification of Being was to continue still further and in the same manner. The universe as a whole is one, since as actuality it is one and as potency it is one; it is eternal, immobile, incorruptible, and in short has all the traits of the One of Parmenides. If one ask why it should have these traits, the answers are purely dialectical. It is immobile, for there is no place outside it in which it could move. It is everlasting as it is, since there is nothing into which it could be transformed—it contains implicit within it all possibilities. It produces nothing, since there is nothing left for it to produce. And so it goes, proceeding on a path already laid down in the conception of the term "whole." Such arguments are always tautological, as perhaps all formal argument must be. For the same reasons it can be neither matter nor form. No particularization can be given of it, for to assert anything of it would be to deny something of it, on the principle that *omnis determinatio est negatio*. And consequently the universe as a whole must be supra-rational. This was the conclusion of Nicholas of Cusa, Bruno's immediate inspiration, and of most medieval mystics following in the footsteps of Erigena.[13]

It is this being which is called The Infinite by Bruno. It is infinite in the sense of possessing all possible beings, not in the sense of extending outward into infinite space or having an infinite number of parts. It is true that Bruno believes the cosmos to be infinite in extent and to contain an infinite number of worlds. But the reason is that he sees no logical limitations to extension or number. One is supposed to envision it with the eyes of a logician or mathematician and, if one sees a possibility, to accept it as eventually realizable. This, in the last analysis, rests upon what Professor Lovejoy has called "the principle of plenitude," first announced by Plato in the *Timaeus*. The principle gained its credibility from philosophers trying to answer the question of why God would not have permitted the existence of a possibility if He is perfect. The only plausible answer would seem to have been His "jealousy." In spite of testimony in the Old Testament to the contrary, it was maintained that God could not be jealous and must therefore permit all possibles to exist. The Infinite itself thus becomes the limit of all perfection and all degrees of perfection must exist within it. Clearly only a series of paradoxes could describe such a being, and Bruno, as we have said above, did not shrink from paradoxes.

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[13] The classic statement of this position will be found in the dialogue *Of the Cause, Principle, and Unity*, Greenberg's translation, p. 160 f. The source of this in Christian writings is probably Pseudo-Dionysius, *De mystica theologica*, 1, 1, where all the traditional adjectives will be found.

The difficulty in the story of Bruno is why this appeared to be so heretical that it required purging by fire. Readers of medieval philosophy are used to such rhetorical devices and they appear in the most orthodox of philosophers. But there were two strains in Catholic philosophy, distinct logically though frequently fused. One is that deriving from the Bible according to which God must be conceived as a person, the creator and judge of the world. The other derives from Neo-Platonism in which God is the One, a simple metaphysical principle without personality but who may be talked about in personal terms. The two strains are to be found not only in mystics, like St. Bonaventura, but also in such rationalists as St. Thomas Aquinas. In the archives of Venice a French historian found a paper in which Bruno's misdemeanors were stated as follows: he was "imputed to have been not only a heretic, but also an heresiarch, having composed divers books in which he praised highly *(assai)* the Queen of England and other heretical princes, that he wrote certain things about religion which are not fitting, *even though he was speaking philosophically* (my italics), and that he was an apostate, having been first a Dominican brother, that he had lived many years in Geneva and in England, and that in Naples and other places he had been investigated on the same charges."[14] Which of these charges was the gravest or whether the gravity lay in the combination, we cannot determine. But surely as far as his philosophic views were concerned, the Supreme Inquisitor, Santa Severina, could have found them anticipated in several of the most celebrated Catholic thinkers. The probability is that his extreme disdain for Aristotle and his complete neglect of St. Thomas were as much to blame as anything else. For he was not a man to conceal his feelings under the cloak of diplomacy.

6. GALILEO

The last of the philosophers whom we shall discuss in this chapter is the famous physicist and astronomer Galileo (1564–1642), whose attitude toward science is not unlike that of Campanella and the natural theologians: "Philosophy is written in that very great book which continuously lies open before our very eyes (I am speaking of the universe), but which cannot be understood unless one first sets out to learn the language and to know the characters in which it is written."[15] This means that authority is rejected for direct observation; and, from what we know of Galileo's work as a whole, we can conclude that observation was not undirected or uncontrolled but was thought of as experimental. But furthermore, he seems to realize the need for knowing what the aim of observation must be; we are not simply to look, but to look *for* something. Following the sentence just quoted, appears the statement: "It is written in mathematical language, and its characters are triangles, circles, and other geometrical figures, without which means it is impossible to understand it in human terms; without which is to wander about vainly in a dark labyrinth." The dark labyrinth is the world of uncontrolled sensory impressions which tell us nothing until they are organized into general principles. These principles are then to be further organized into a mathematical system such as we find in geometry. What we are to look for, then, is some hint of mathematical order.

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[14] See Christian Bartholmess, *Jordano Bruno* (1846), Vol. I, pp. 320 f.

Now the senses may not give us quite so dark a labyrinth as Galileo seems to assert. But it is undoubtedly true that the very variety of what we see, hear, taste, smell, and touch is bewildering. It might have been easy enough to classify such impressions on the basis of the organs through which we perceive them and thus to speak of the traditional five senses. But this classification is not based on similarities in the qualities which we perceive at all, for in all groups of sensory impressions there are qualitative gaps. Thus there is no logical passage between the various colors. No one from the statement that we have eyes could infer that we should see red, yellow, blue, and so on. It might be inferred that visual impressions would vary in degree, from light to dark, from intense to less intense, from strong to weak; that is, from more to less; but that there should be discontinuous passages from one distinct quality to another (when it might be presumed that the same kind of cause was operating to produce them all) seems logically distressing. But the same is true of all our five senses. Tastes may be classified into bitter, sweet, sour, and salt, as has been done traditionally, but again there is no logical passage from bitter to sweet, or from sweet to sour, or from sour to salt, nor does one discover such a passage in any of the other directions. A little reflection will show that the same holds good for the other sensory qualities; in all there will be seen to be sharply differentiated qualitative discontinuities.

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[15] *Il saggiatore,* in *La letteratura italiana storia e testi* (Milano, n.d.), Vol. 34, T. 1., p. 121. It will be remembered that "philosophy" and "science" were synonymous at this time. The best discussion of Galileo's method in English that I know is in E. A. Burtt, *The Metaphysical Foundations of Modern Science* (New York: Humanities Press, 1952).

Moreover, there would be no predicting on the basis of having eyes, optic nerves, a brain, that the stimulation of this physiological apparatus should give us something so unlike it as colors. And who could have foretold that something so unlike a sound as the auditory apparatus could give us sounds, or that a chemical stimulation of olfactory end organs could give us something so evanescent and various as odors? If logic proceeds by explicating what is implicit in a set of verbal statements, then our sensory qualities, both in their variety and their discontinuity, present a logical puzzle.

Finally Galileo, like the Ancients, was aware of the individual differences in perception and of the illusions which we suffer when we rely on them. Thus for him the variety and the unreliability of perceptions made it imperative to discover some means of organizing and simplifying them. The simplification was produced not merely by the usual classification on the basis of the organs that transmitted them or produced them, but also by looking for characteristics of the world that would be the universal underlying source of them all. Are there then any properties which can be attributed to all material objects indifferently? The answer is given in Galilean physics. There is a set of properties which are sufficient and necessary to interpret dynamics, and that set will be given to the "real" world as distinguished from the "subjective" world.

The argument to the subjectivity of what John Locke was to call the secondary qualities, was set forth also in the *Saggiatore*. As soon as I attempt, says its author, to conceive of a material or corporeal substance, I find that it must have a certain shape; that it has a certain size in relation to other such substances; that it is in such and such a place, at such and such a time; that it moves or is at rest; that it is or is not in contact with another body; that it is one, little or big. These properties belong to any such substance, regardless of how I perceive it, whether with the eyes, ears, nose, or other sense organ. These properties are, then, universal in the world of matter. They may obviously be summed up as configuration, volume, location, date, motion, relative position, quantity. These are all properties which can be treated in the "geometrical manner," and subjected to quantitative manipulation, in the literal sense of "quantitative." That is, the "more" and "less" can be submitted to actual measurement when they are applied to objects thus described; whereas when we speak of the qualities, such as red, sweet, and warm, as more or less, we have to measure their degree of intensity through the use of an instrument which will translate the quality into a quantity. In fact, it would be difficult, if possible, to assign a literal meaning to the statement that this is redder than that, in the way in which we say that this is larger than that. Of course if we mean by the former statement that this area was painted with more red pigment than that, the meaning is clear, but it is no longer qualitative.

Moreover, Galileo makes it plain that in his opinion there is no reason for attributing the qualities which Locke taught us to call "secondary" to the material world, since they could vary while the other properties remained constant. He could imagine a material object of a given size which might have a variety of colors, but he could not imagine a colored object which did not have some size. All objects must have the dynamic properties which have been listed above, but they need not be either white or red, bitter or sweet, loud or soft, pleasing or displeasing to the nose. Such adjectives, he says, are mere words *(puri nomi)* when applied to the objective world; they have their seat only "in the sensitive body"; and hence, if the animate beings were removed from the world, they would carry with them all these qualities. He demonstrates his meaning by pointing out that even in touch, which may give one a perception of the physical and objective properties of an object, there may arise other perceptions, an excitation of the skin, a tickling sensation, which no one would attribute to the object. Moreover the same tickling sensation may be produced by a feather that is lightly moved over the human skin. We do not say that the sensation is in the feather but in us. It is this kind of existence, and no other, he concludes, that must be attributed to the many qualities that we call tastes, odors, colors, and others.

But none of this implies for Galileo the consequence that the various subjective qualities cannot be correlated with certain types of material objects. Thus a material object when it comes in contact with the human body "produces in me that sensation which we call touch," and which we locate for the most part in the palms of the hands or in the finger tips. Here we feel those differences that we call rough, smooth, hard, soft, of which some are pleasant, some unpleasant, "according to the different configurations of the tangible body," whether it be smooth or rough, sharp or dull, resistant or yielding. He correlates all these qualities of touch with the traditional element *Earth*. In fact, the theory of the four elements gives him a basis for classifying all the sensory qualities: tactile as arising from Earth, taste from Water, odor from Fire, and sound from Air. Since there are only four elements but five senses, he attributes sight to the influence of the Ether.

A little story in the *Saggiatore* relates how an investigator discovered the various ways in which sound could be produced. It looks as if Galileo believed one had only to look at "the facts," as they are called, and they would reveal their own nature. But as one reads his little story, one sees that not even his investigator approached the facts with an utterly unprejudiced mind. He first formed tentative hypotheses about how sound was produced and then looked to see whether or not they would be verified.[16] Our reason for emphasizing this, which is perhaps obvious to one who has even a rudimentary knowledge of the history of thought, is that we are accustomed to speak and hear of the first steps in science as simple observation, to believe that scientists have only to look at the facts, as they are called, that these facts are perceptual data, and that they alone will tell their story. This tradition begins with Telesio in Italy, receives support from Campanella, and is reinforced by the work of Francis Bacon in England. Its philosophic development will be found in those British philosophers known as British Empiricists.

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[16] The story will be found in the edition cited, pp. 199 ff.

CHAPTER 2

Italian Platonism

Readers of Shakespeare's sonnets, of the *Faerie Queen,* and of the works of Milton, Shelley, Keats, Tennyson, and Swinburne have absorbed, whether they are aware of it or not, echoes of a philosophy which found its first modern expression at the end of the fifteenth century in Florence. This philosophy, which is usually called Platonism, is a mixture of Platonic themes and neo-Platonic interpretations of them. Apologies and defenses of poetry, hymns to intellectual beauty, statements of the Divine Ideas in accordance with which this world was created, praises of heavenly love, idealizations of friendship, ideal communities, along with a score of other themes, derive ultimately from a few Florentine writers, outstanding among whom are Marsilio Ficino, Pico della Mirandola, and Leone Ebreo. Their influence spread well beyond the Alps and well beyond literature. We find it, as such scholars as Panofsky and his former colleagues in the Warburg Institute have so well shown, in painting and sculpture. In fact, it is likely that the original interest in perspective, which did so much to change the form of painting—to say nothing of the subject matter—was attributable to the Platonic interest in geometry. Even Galileo, whose empiricism, as I hope we have seen, culminated in a kind of anti-Platonism, developed an idea which had its origin in the *Timaeus;* I refer to his statement that the world must be interpreted in terms of circles, triangles, and other geometrical figures.[1]

It is usually assumed with some reason that knowledge of Platonism came into Florence with the arrival of Gemisthus Pletho, a Byzantine philosopher who came to Italy about 1440 to negotiate the reunion of the Eastern and Western Churches. But in an account as short as ours we must consider Marsilio Ficino to be the originator of the school. That the group who made up the famous Academy in Florence, men like Poliziano, Landino, Pico, Alberti, Michelangelo, were representative of both art and science at the end of the fifteenth century, surely needs no proof. With the exception of Leonardo da Vinci, they may also be said to be the minds who set the pattern of high Renaissance thought, and it is a question how widely Leonardo's thoughts could have been known. For it must be remembered that most of his ideas were not only kept in private notebooks but also written in a kind of cipher. He does not seem to have been one who wished to teach others. But Ficino and his associate, Pico della Mirandola, were both avid students and zealous teachers, and in their case we need have no hesitation in setting them up as the sources of later Platonism.

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[1] For an extended discussion of this point, see A. Koyré, "Galileo and Plato," *Journal of the History of Ideas,* IV, No. 4 (October, 1943).

1. Ficino

Marsilio Ficino (1433–99) both developed a philosophy of his own and translated the works of Plato and Plotinus as well as the Hermetica into Latin. Before the knowledge of Greek became common, men read these translations much as their forefathers of the Middle Ages had read Chalcidius's translation of the *Timaeus* and as we read Jowett. It must also be pointed out that the translations were amply provided with explanatory glosses which were freely used when readers found passages too difficult to understand by their own means. As for his own writings, we find him producing juvenilia on Epicurus and on Pleasure, and later, a more mature work on the immortality of the soul and the Christian religion.[2] He was a typical eclectic, taking what pleased him, rejecting what displeased him. But after all none of us is without his intellectual ancestors. Yet Ficino laid down as a philosophical principle that there was truth in apparently contradictory philosophies, such as those of Plato and Aristotle, the apparent contradiction lying in the words in which they were expressed. Thus no philosophy would seem to be wholly false; the scholar's problem was to discover and unearth that which was true in it.

This rested upon an assumption which was to eventuate in the philosophy of common sense, though that philosophy differed widely from what Ficino believed. To him there were certain truths, which could be called either religious or metaphysical, revealed in the Bible and expounded rationally in the writings of the philosophers, both pagan and Christian, Eastern and Western. There could thus be no real contradiction between philosophy and revelation. The trouble obviously lay in the adjective "real." But at least as early as Philo it had been believed that the correct interpretation of the Scriptures was allegorical, and by the thirteenth century the number of possible interpretations had grown to four: the literal or historical, the allegorical, the tropological, and the anagogical. This was all very well and usually succeeded in preserving the truth of any statement, however bizarre, that one wanted to believe was true. But behind it lay the greater problem of how one could verify the various interpretations. In practice tradition did the work, and tradition could only be that part of the entire tradition which was known to the interpreter himself. Sometimes the theory of multiple interpretations was based upon Christ's use of parables. Sometimes it was based on the curious idea that symbols, allegories, enigmas were used to prevent the vulgar crowd from penetrating into mysteries of which they were unworthy. It is indeed strange that knowledge, which was supposed to redeem and sanctify us all, should have been concealed from those most in need of it.

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[2] For a more complete list see Eugenio Garin, *La filosofia,* I, in the *Storia dei generi letterari italiani* (Milan, 1947), p. 299.

That the ancient philosophies were a preparation for the reception of the Gospels was an idea which had been expressed in very early times and it is one which has survived into our own time.[3] Furthermore, Plato's *Timaeus* with its creation story was an ideal presentation of a philosophy which could be made harmonious with parts of Genesis and had been so used during the Patristic and medieval periods. Moreover, Plato himself and the Neo-Platonists had made use of myths for many purposes, and the latter had even given allegorical interpretations of both traditional myths and quasi-historical legends such as appear in the poems of Homer. As a matter of cold fact, the practice is not much different from the interpretations now current of the plays of Shakespeare, especially of *Hamlet,* in which the poet is seen as revealing in symbolic form things of which he would have been ashamed to speak openly, things which the Collective Unconscious permitted to appear only in disguise, or even things of which it would not have been prudent to speak overtly because of political restrictions.

Whenever an allegory is interpreted, and I use the word "allegory" loosely, there must be a key and, by the nature of the process, the key at least must be a set of literal statements. For Ficino

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[3] See F. J. Copelston, S.J., *A History of Philosophy* (Westminster, Md.: Newman Press, 1946), Vol. I, pp. 502 ff.

Platonism was that key. But before the key could be utilized, faith was needed in that which was held to be the meaning of the allegory. The old motto *credo ut intelligam* meant simply that one was going to use one's intellect to make one's faith intelligible, as one might today hold that one was going to justify the way of God to man or to give a defense of naïve realism. The difficulty arose when one was asked in what precisely one had faith. For were one to answer that question, one could not reply in terms of the allegory, but must have recourse to its interpretation. For the sake of argument, let us suppose with Tertullian that the doctrine of the Incarnation is logically absurd. Then clearly it can be stated only in terms of inner contradiction until it has been rephrased in literal language. Tertullian, of course, believed that no such paraphrase was possible. But it is conceivable that some philosopher would attempt to put in rational language that which up to the date of his struggles had existed only in allegorical language. Such a man would first have to know what the dogma meant before he could succeed. But he could only acquire such knowledge if he had access to the very goal which he himself was attempting to reach before he set out to reach it. But if one has already assumed that the human race—or at least the elite—has a common store of knowledge and that over a thousand years of illuminating that knowledge are in one's library, then the task of interpreting the allegory is easier. If Ficino had not accepted Neo-Platonic philosophy as the truth and then assumed that the truth was one and unique, he could not have concluded that the apparently different truth of Christianity was the same in meaning as the truth of what he believed to be Platonism.

But in that case Ficino was almost forced to maintain that the source of philosophy was also the source of religious insight. Fortunately for him there was an authority, Justin Martyr, who had maintained that the Logos had inspired Plato as it or He had inspired the Apostles. Both had seen the same thing. What they had seen was the dialectical fertility of The Word. The notion that by an inner force ideas flow out of a fountainhead, that they proceed like light which pours forth from a single source and spreads into darkness, was at least as old as Plotinus. But there must be some power which impels us to seek that source of light. In the *Symposium,* Plato had made Socrates relate a speech of a seeress Diotima, in which she speaks of the scale of Beauty, running from corporeal beauties to absolute ideal beauty, from the many particular instances of beautiful things to the Idea of Beauty itself. One can mount this ladder only if one is attracted upwards by Love of

Beauty. In Plotinus love arises by the attraction which the soul experiences upon seeing its reflection in others. The soul is the idea of the human being, beauty is the idea of whatever is beautiful, its form in Aristotle's term, that for which it exists. But since in Plato, as in St. Paul, the human being was a duality of soul and body, each might have its form or idea and a person might easily be attracted to the form of the body instead of to the soul. Plato's theory of love is not intended to be a description in psychological terms of man's erotic experiences. It is a corrective of them. It is a plea that men turn from love of the body to love of the soul, union with which will procreate not other bodies but minds. The role of the teacher in Plato is that of the midwife who brings perfect minds into the world, but since there was always the danger that the earthly Venus would prevail over the heavenly, an act of will was needed to turn one away from the former to the latter. And also there was needed an act of faith that the latter was nobler than the former.

To fortify the notion that the force of love was of an importance transcending human affairs was the statement of Aristotle that the Prime Mover moves the world as the beloved moves the lover. The cosmos is attracted to its First Cause, not pushed by it, and thus when the Prime Mover turns into God, God is interpreted as the goal of all our striving. There was, hence, nothing novel in the idea when the Florentine Platonists took it up. It had been expressed in scores of mystical writings, in such works as Dante's *Convivio,* and of course in numerous medieval hymns. And since Love, as *Caritas,* had always been one of the Christian virtues, the Platonic discourses seemed merely to bolster a theory which was at the very heart of orthodox Christianity. But Love is a feeling which anyone, philosopher or not, can feel in one form or another, and therefore all the philosopher had to do was to clarify its significance, to give a rational account of its role in the universe. For one loves without knowing why, and thus the simplest soul may share with the most learned man the experience of what the latter would have called the essential mystery of life. But this is precisely what religion was looking for. Throughout the Middle Ages there had been a search for a rational account of the religious experience, an account which need not be understood before having that experience. The Platonic tradition seemed to Ficino and his fellows, as for that matter it did to St. Augustine, to provide it.

The Italian historian of philosophy, Eugenio Garin, has rightly emphasized the Franciscan element in this attitude.[4] If "love can penetrate where no science can go," then science is needed, to be sure, for philosophy, but not for religion. We shall see this motif recurring later. When religious philosophers emphasize that religion operates through an act of will, rather than of reason, they are probably trying to express the same thought. But even the will, even love itself, is unfortunately bound in some way to the body. This way may be only in what the Platonists would have called the lower levels, but the metaphor of levels is not of much help. For our knowledge of love begins, at any rate, with corporeal love and, as for the will, it begins with moving the body. Ficino's problem is to find some way of decorporealizing both, for, to begin with, the body is perishable and its functions must cease with it. There is no need to point out why he wants a soul which will not perish. Aristotle had given some ground for the belief that it was man's active reason which was immortal, but that would not do for Ficino. For the reason, whether active or not, was the one psychic faculty which was alike in all men—even the least religious philosophers clung to that, as we shall see when we come to the philosophers of the French Revolution. Moreover, there had been Arabian metaphysicians who had seen in the universality of the reason evidence for the soul's loss of individuality after death. The will, however, is individual and remains individual in all its activity. Even if two men love and desire the same thing, they retain their individuality and do not merge into the object of their desire.[5] Thus if the essence of the soul is its love of God, the soul is not lost in God, as the mystics maintained, but is purified by the object of its love while still retaining its separateness from other wills. Ficino is striving to describe a community of souls adoring the Supreme Being; and his fundamental problem, especially in view of the doctrine that it was matter that individuated things, is to account for individuals who have no matter. Plotinus had already laid down the principle that human souls were replicas of the Divine Mind (the *Nous*) and thus were individuated before their incorporation. Ficino could not accept the idea that we had existed in another world before birth and that our birth was "but a sleep and a forgetting," for that would have been in conflict with Christian dogma. But he could maintain that just as the source of light sends out individual rays, so our souls may maintain their individuality even though coming from a single source and returning to that source.[6]

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[4] *Op. cit.*, I, p. 306.

[5] Jealousy alone would suffice to keep them apart.

The soul then is, regardless of its incorporation, an individual. It is not the form of the body in the sense that the body determines its nature or its individuation, but is the body's form as that for which the body exists. In Plotinus's system the soul's work in the universe is to govern a body and one might almost say—though one would be wrong if the "almost" were omitted—that the soul individuated the body. The human being is an irreconcilable duality. Human life is a battle between two contrary natures, temporarily linked together for moral purposes. The body may conquer the soul, to be sure, but the purpose of the soul is to conquer the body. It is freed from its task at death; but unlike Plotinus, Ficino did not believe that it had an infinite number of opportunities to try again. Its position in the body is that of the Soul of the World *(anima mundi)* in the universe. The Soul of the World served the Platonists as an explanation of the activity of the cosmos. It seemed clear that if there was order in the universe, there must be more than brute matter in it. Clearly this order came ultimately from God, but by removing God from all possibility of contagion with multiplicity and time, one removed Him also from all effective contact with His creation. As the *ens realissimum* He had lost all describable characters; He could be spoken of only in negative terms. One might some day look upon Him, but one even then could not describe Him. In Plotinus there was a Trinity of three hypostases, the One, the *Nous,* and the Soul of the World. There had been heretical suggestions in the Middle Ages, one for which Abelard was condemned, that the Soul of the World was the Holy Spirit. Ficino did not fall into this heresy, but he did revive the idea that all beings owed their orderliness, life, and perhaps their beauty to their participation in the universal soul. It must be remembered that, until the time of Galileo, matter was believed to be completely inert. Movement was always imposed upon it. And force was immaterial. The Soul of the World was the being ideally fitted to provide that force and to act in relation to the universe as a whole—and of course it was believed to be a whole—as the human soul behaved toward the human body.

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[6] There is great need for a history of the idea of light and the various theories which have been elaborated to explain its peculiar nature. In ancient times it was believed that light was immaterial, that it traveled instantaneously, that vision occurred when a beam from the eye met a beam from the luminous object, as in Donne's, "Our eye-beams twisted and did thread / Our eyes upon one double string." Many of the ideas of Renaissance and even later philosophers concerning knowledge would be clarified if their readers knew that they accepted these ideas about light and vision.

Finally we have in Ficino a theory of beauty which was to dominate the European imagination until our times, the theory that the beautiful is the idea in corporeal form.[7] A statue of a man is not just a literal representation of a given individual, but an incorporation of the ideal of humanity; a portrait must present not merely the peculiar features of the individual portrayed, but the ideal for which he stands; a sacred picture must be an emblem of the theme symbolized in the story which it illustrates. In the sixteenth century this program was to be used by Cardinal Bellori against such a "naturalistic" painter as Caravaggio. But how was one to attain a vision of the ideal? By the inner eye, not the outer. The latter could give one only the material and sensuous appearance of things; only the former could give that of which the outer appearance was a hint. It must not be forgotten that the young Michelangelo was a member of the Florentine Academy, nor will it be forgotten by those who have read his sonnets. Should anyone doubt the influence of Platonism on his powerful imagination, conviction will probably arise through reading the various studies which Erwin Panofsky has made of his works and thoughts. But the movement was not terminated at the end of the sixteenth century, and well into the nineteenth painters were speaking of the *beau idéal,* though far from clear about how one reached it. The most practical advice on the subject was probably that of Reynolds in his *Discourses* when he maintained that ideal beauty was found in something like the statistical mean.

However strange this may seem to eyes accustomed to the naturalistic school of art, for generations—ever since the days of Theophrastus in literature and perhaps from those of the Humoralists in medicine and psychology—it had been believed that men were of certain types or characters. Consistency of character, as it was called, was logical consistency. If Achilles was to be always Achilles, as the followers of Horace asserted, then there must be an Achilles-type whose behavior could be predicted rationally. The ritualization of themes, gestures, facial expressions, dialogue, depended in the last analysis upon the theory that people "stood for" something, were not simply themselves, but incorporated ideal traits, whether these traits were those of the miser, the hypocrite, and the flatterer; or the hero, the gentleman, and the perfect lover. It was not until our own times, after all the preliminary work of writers like Zola and painters like Courbet, that it was possible to see people as individuals, not of a piece, not always brave and strong, but sometimes also fearful and weak; not always truthful and courageous, but sometimes also mendacious and cowardly. What we have gained in realism we have lost in intelligibility. But to the aesthetic idealist all nature became intelligible for the very reason that it became standardized. This is not meant to imply that Zola first read Ficino, or even Bellori, and then rejected them. But it does mean that the tradition which Ficino and his fellows revived lasted in various expressions well into our own times.

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[7] The most accessible, and one of the best, expositions of this idea will be found in E. Panofsky's essay, "The Neoplatonic Movement in Florence and North Italy," in his *Studies in Iconology* (New York: Oxford University Press, 1939).

2. Pico della Mirandola

If I discuss Pico della Mirandola (1463–94) immediately after Ficino, it is not that he was a disciple of Ficino but that he shared many of his ideas and that his influence ran in the same direction. And if I call him a Platonist, it is not because he did not accept the teachings of philosophers other than Plato, but that his influence was largely upon those men usually grouped with Platonists. His aims and teachings were stated as follows in his famous defense of himself and his thoughts: [8]

> Not satisfied to have added to the common opinions many things about the ancient theology of Hermes Trismegistus, about the disciplines of the Chaldeans, of Pythagoras, and the more secret mysteries of the Hebrews, I have propounded myself as well a great number of ideas discovered and reflected upon by me concerning natural and divine things which required discussion. We proposed first a harmony between Plato and Aristotle which has been accepted by many in former times, but never properly proved. Boethius amongst the Latins promised that he would do this, but never discovered how he could realize his wishes. Simplicius amongst the Greeks attempted the same task, and would that he had succeeded as well as he promised. Even Augustine in his work on the Academics wrote that there were many who had tried to prove the same in their most subtle disputations, that is, to show that the philosophy of Plato and Aristotle were the same. Likewise John the Grammarian, though he said that Plato differs from Aristotle only in the opinion of those who do not understand Plato's language, nevertheless left it to posterity to prove it.

He continues by asserting that he was relying on Duns Scotus and St. Thomas, Averroës and Avicenna, to bring about what he called a *pax philosophica,* a harmony of the philosophers, and to do this by utilizing the numerical methods of the Pythagoreans. He would bring to bear on his problems the doctrine of magic, as understood by the Persian Magi, and the allegorical technique of the Neo-Platonists who interpreted the story of the Odyssey as the search for a single philosophy, and finally the procedures of the cabalists.

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[8] *Oratio de hominis dignitate,* ed. Garin, in the Edizione nazionale dei classici del pensiero italiano (Firenze, 1942), p. 144.

Here he clearly assumed that philosophic truth is one and unique, as he believed religious truth to be. Philosophies differed either in the means which they used to expound this unique truth, or in the part of the total truth which they were interested in demonstrating. But it becomes clearer as one reads his writing that the single underlying truth is that of Christianity, as he understood it, and that all philosophies, whether Christian or not, were attempting in his opinion to demonstrate that truth. Whether this program is to be labeled eclecticism or syncretism, both of which terms are in bad odor, is of small importance. Pico apparently saw no difference between Plato and Aristotle, St. Thomas and Scotus, and if one makes a distinction between what a writer says and what he *really* says, if the wanderings of Odysseus can be interpreted as a philosophical myth, then all one can do is expound the unity of thought which lies beneath the diversities of expression. That words do not mean what they say was usually justified at this time by the theory that the common people were not able to understand the truth. The use of parables in the Bible and the legend that the Greeks had secret esoteric doctrines were both called upon as evidence that the popular mind must be protected from a knowledge of philosophic arcana.[9] It is very curious that men who believed in a universal, not a tribal, religion should also have believed in the advisability of keeping its doctrine unexplained in clear and intelligible language. But I suppose that the hierarchical notion of rank and dignity, of the essential unworthiness of the *plebs,* which was certainly current in the Middle Ages, had survived to the detriment of a more charitable idea.

Whatever the reason, Pico firmly discusses man as man and not merely the upper orders of mankind. And man, he maintains, as the Scholastics had as well, God had created to understand rationally the Creation, to love its beauty, and to admire its vastness. But as there was no archetype for such a being, nor any place for him to be located, He made him of an indeterminate nature *(indiscretae imaginis),* that is, *sui generis,* and placed him in the center of the universe. His lack of a larger species to which he might belong, as well as his lack of a peculiar habitat, was a liberation for him. This left him free to contemplate all things both below and above him. He was neither terrestrial nor celestial, so that he could himself make a life for himself. He could either fall to the level of the brutes or rise through regeneration to the level of the divine. There would have been four possibilities open to him: to live the vegetative life like a plant; the sensitive, like an animal; the purely rational, like a "celestial animal"; the intellectual, like "an angel and son of God." But he might too, belonging to no class of beings, withdraw into himself and become a spirit alone with God. The innermost secret of religion is man's mutability—now a vegetable, now an animal, now an angel.

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[9] I have touched upon the idea of justifying philosophic secrecy in the introduction to my translation of the *Hieroglyphics* of Horapollo and have attempted to show how little evidence there is for ancient esoteric doctrines in "Ancient Testimony to Secret Doctrines." *Philosophical Review,* LXII, No. 1 (January, 1953).

> It is not the bark which makes the plant, but its insensitive nature; not the hide which makes the brute, but its purely sensual soul; not the circular body which makes the heavens, but right reason; not the lack of a body which makes the angel, but his spiritual intelligence. And should you see a man given over to his belly, lying on the ground, he is not a man but a plant; if someone blinded by the empty phantasms of Calypso besmirched with seductive charms, delivered over to the senses, he is a brute, not a man. If a philosopher, discerning all through right reason, you would venerate him; he is a celestial animal, not terrestrial, a more august deity in the dress of human flesh.

Thus man can change himself at will and represent in his ways of living all the beings which are in the universe.

Students of medieval and Renaissance literature will recognize in this an echo of the ancient microcosm-macrocosm leitmotif. If man is to reproduce in miniature all that is in the universe, then clearly his whole life and soul must reproduce all the kinds of life and souls which exist. But he must also not be identified with any particular type. His task as a human being is to emulate the life of all beings and it is in this that he resembles God in Whose image he was made. For God, too, in some mysterious sense is in all things, though Pico also maintains, as his intellectual ancestor had, that He is also above all things. Pico takes over the Aristotelian notion of vegetation being matter in relation to sensitivity, sensation being matter in relation to reason, and adds to it the idea that reason must rise to pure intellection. But his attempt at a fusion of Aristotelian and Platonistic thought leads him to insist that the "parts" of the soul are not literally parts at all, that the soul is a unit, as God is. When man has achieved his destiny, he will be above heaven and earth, like the seraphim, cherubim, and thrones. It goes without saying that he interprets these three choirs of angelic beings as three psychic functions, Love, Intelligence, and Judgment, which functions are precisely the attributes of God.[10] There are few pages in the history of philosophy more eloquent than those in which Pico describes man's life when it is lived in imitation of these powers. The argument behind them is simple. Man must realize his essential nature and his essential nature is found in his kinship with the Creator. Therefore we must live in a manner dictated by that proposition. The thesis is that of the Ancients, though the phraseology is different. Our peculiar status in the universe is that we are not condemned to live according to a fixed and universal rule, as stones must fall, fire must rise, and even the angels must perform their allotted tasks. We are free to move up or down, upward toward God or downward toward matter. Whether we argue like some of the Greeks that we must live "in accordance with Nature," or "in accordance with our nature," the framework of the argument is the same. The Good of each thing is the fulfillment of its essential nature and man's happens to be that of God. He is a peculiar being in that he alone recapitulates the cosmos in all its details. But just as the cosmos manifests different levels of value, as well as different kinds of life, so does man. The fusion of value with the scale of Being complicates the problem, for it entails the belief that since certain levels are inherently better than others, we should make the effort to attain them.

Pico's brave attempt at a syncretism of all philosophies was justified by his consideration of man as man, a being not divided into tribal or sectarian groups. The word "catholic," apparently, he meant to be taken seriously, as meaning *universal*. What more natural than that he should believe all men, whether of his own church or not, to possess a glimpse of the fundamental truths concerning their own being and that of God? How could it have been possible that God would have deprived some of his children of the truth? If that was not possible, then the philosopher must undertake an elucidation of the single truth which was expressed in so many ways. Clearly there must be some ideas which are false, for contradiction exists between various schools of thought. Hence some test of validity must exist and that test is to be found in Christian revelation. Having then decided on what revelation meant, Pico had at his disposal a way of selecting out of all the theories which he studied so zealously those which were true and those which were false. His use of Orphic hymns, of the cabala, of Zoroastrian remnants and Chaldean oracles, of Neo-Platonic interpretations of the Homeric hymns and even the epics was always guided by this principle.

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[10] It also goes without saying that they are not attributes in the literal sense of that word.

The clash in opinion between the members of the Platonic and those of the scientific tradition lay in what they believed to be the end and purpose of philosophy. For the latter, knowledge was a terminal value; the possession of the truth need not be justified by any further purpose. We are essentially rational beings and we must attain full rationality. To understand suffices. But to the Platonist knowledge had a moral purpose. It must be that peace which passes all understanding, the peace of mind which the Stoics also had sought in their way. "There is indeed," he says, "in us much discord. We are waging within ourselves grave and internal and worse than civil wars. If we do not wish this, if we wish to attain that peace which will bear us aloft until we are placed amongst the Lord's chosen, only moral philosophy can restrain us and seat us there." Dialectics will quiet the strife of philosophies; natural philosophy (i.e., science) will settle the vexing disputes of opinion; and we shall remember, as Heraclitus said, that nature is in a state of war. Remembering this, we shall reach the peace and quiet which theology alone can give. "This is that friendship which the Pythagoreans said was the end of all philosophy, this that peace which God had made in His heavens, which the angels descending to earth announced to men of good will, that through it men themselves ascending to heaven might be made into angels." It was this peace and friendship which he says he was trying to introduce into his age and society.

So much will suffice as a brief outline of Pico's program and of the way in which he thought to realize it. The rest of his work is involved in carrying it out in detail. His hexaemeron, the *Heptaplus,* his *De ente et uno,* and even his attacks on the astrologers were all directed to making clearer the universal basis of those ideas which he believed to be the single Truth revealed in Christianity and expounded in the works of the philosophers and theologians of all places. Since Pico was one of the Italian philosophers who were most read by later writers, it is not difficult to see why a doctrine of a universal religion should have been suggested by his writings. The English Platonists, who had left the Catholic Church, could still take over his main theses and use them to argue to a religion which was naturally implanted in all men regardless of ecclesiastical affiliation. Was it a foresight of that possibility which led his Church to condemn him?

There is but one other work of Pico's which it seems necessary to mention before leaving him. That is his commentary on Benivieni's *Canzona de amore.* Benivieni had written this poem as a short expression of the ideas which Ficino had expounded at greater length in his commentary on Plato's *Symposium.* The work, says Benivieni in his epistle to the reader, was not intended for publication and was in fact published after the death of Pico. It was written as a Christian interpretation of Plato's theory of love. Benivieni is almost ultra-careful to point out that he himself was not attempting in his *Canzone* to state Christian truths, nor was Pico in his commentary doing more than "reciting simply and without any approbation the opinion of another." The *Canzone* consist of nine stanzas, beginning with the usual *apologia* in the form of an invocation to Love, which dwelling within the poet's heart seeks flight to the upper regions of the universe. Love is then presented, as in the last line of the *Paradiso* as that which moves the heavens and rules the world.[11] It is the same force which moves the human heart and urges man to seek God. It is the same love which descends from God to the angels and from them step by step enters into the human mind as rays of light from the sun illuminate the earth and are reflected upward. It is first manifested to us as erotic desires which impel us to unite with the object of our desires, but which are the first evidence of that eternal love which is God's love for His creatures. Out of it is born the Heavenly Venus. Benivieni plays upon the dual relations of love, that which moves us upward and that which moves downward to us. We see the beloved object as beautiful, with the beauty of the body, the spirit, and the mind; and the soul then unites these various beauties into one. In short, the whole poem is an idealization of the force of love in the typical Platonistic manner, containing nothing which had not previously been expressed by a dozen mystics and which was now to be expressed over and over again. To us living in the twentieth century, acquainted with even a portion of the history of poetry and philosophy since the time of the Renaissance, it seems traditional enough to occasion neither surprise nor worry.

Pico's *Commentary* on this poem is really a treatise in itself which can be understood without reference to Benivieni. It begins with making a distinction between three forms of being: causal, formal, and dependent *(participato).* To use his own example, the sun is not hot but is the cause of heat; fire is hot and heat is the form of fire; wood is not hot nor the cause of heat but, by participating in the quality of fire, becomes hot. Of these three forms of being, the causal is the most noble and perfect. God is the purest cause and the cause of all beings, and is therefore above all beings, His transcendence being absolute. There are similarly three kinds of creatures: the corporeal and visible, such as the heavens, the elements, and all things composed of the elements; the invisible and bodiless, which are angelic; and between them, ourselves. Above them all is God, Whose being is the primary source of causality, and from which flow the other natures. But immediately posterior to God in the cosmic hierarchy there is a single incorporeal being which has been produced, not created, *ab aeterno*. This being is as perfect as possible and is called Wisdom *(Sapienzia)*, Mind, the Divine Reason, or the Word, according to which philosopher one happens to be reading. It is to be noted that as he develops his argument, he points out that each step is based upon a group of authorities both Christian and Pagan, the Platonists, Hermes Trismegistus, Zoroaster, and "our Theologians." But he is careful to say that Wisdom is not what "our Theologians" call the Son of God.

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[11] The literary origin of this is of course in Aristotle, not in Plato. It will be found in the famous passage on how the Prime Mover moves the world, *Metaphysics* XII, ch. vii.

There follows a section on the two modes of beings, Ideal and Formal, which is important in our context since it establishes clearly the thesis that there exist in the mind certain ideas, which are Platonic essences, in accordance with which individual particulars are created. The Platonic distinction between the essences and the existents is thus retained, and a guarantee of a single and universal and eternal system of truth is established. The importance of this cosmic duality emerges in the writings of the later Platonists who will tend, on the model of Plotinian emanationism, to derive our sensible precepts from our ideas. The difficulty of elaborating a satisfactory theory of truth on the basis of individual perceptions, which presumably must by their very nature be localized and dated, and thus could not form universal and necessary statements, was to loom large in the next century in France and England. But if one could believe that there actually was a complete system of ideas, eternal and universal in their scope, a system called the Ideas in the Mind of God, truth would be established by the adequacy of our particular ideas to these general ideas.

Since man in the *Commento,* as in the *De dignitate,* was in a position midway between the material and the ideal worlds, and "as every mean participates in the extremes, so man is in communication and harmony through his divers parts with all the parts of the world, for which reason we are accustomed to speak of him as a Microcosm, that is a little world." The cosmic hierarchy runs, as throughout the European tradition, from the minerals, through the plants, the animals, the rational animals (men), the angelic minds, above which is God. But similarly in man we find a corresponding hierarchy, running from his body, through his vegetative powers, his sensory and motor powers, his reason, to his intellectual and angelic faculty. It is because of this correspondence that we can participate in the knowledge of the intelligible world. It is not foreign to our nature and the apex of our mind touches it.

With this as an introduction, Pico turns to the theory of Love. Love in its widest sense means our desire for what we consider to be good. Avarice, ambition, piety, friendship, are all forms of love. But in a stricter sense it is the desire for the beautiful, for our other desires differ from love in this sense in that when we are moved by them, the object of our love does not reciprocate our affection. In real love, there must be something reflected back upon us, as, in our love of God, God reflects His love upon us and, in friendship, our friends feel friendly to us as well as we to them. Love is then simply a species of the genus Desire, differentiated from other forms of desire in that it is a desire for the beautiful. Now just as knowledge is a kind of possession—"all things are mine because I know them all"—so there is harmony and similitude between him who desires and that which he desires. Love can exist only between similars, he maintains, and where there is dissimilarity, there is hatred.

But between cognition and desire there is a parallelism. "Appetite follows upon sensation, choice upon reason, volition upon the intellect." In this manner we rise above our animal nature to our angelic nature and arriving there our desire is for the beings of the intelligible world. But as there is a kind of beauty on each level, the beings of the intelligible world have a beauty which is supreme. Our attraction toward ideal beauty is the highest form of love; it is the attraction which the highest part of our soul experiences for that which is closest to its nature. It is our fate to be capable of descending toward the lower realms of the cosmos in our appetites or upward, so that love of intelligible beauty is the fruit of a long education. Such education is always self-education: a man must understand philosophy, must know that there is in the universe a principle of value, must strive to bring into being his better potentialities. For Pico does not maintain that we automatically rise above our bestial natures. Choice, judgment, will are required to discriminate between our goals and decide to seek the highest.

This will suffice as a very brief sketch of the *Commento*. There is no need to dwell upon Pico's elaborate interpretations of Greek and Roman mythology nor to expound in detail his stanza-by-stanza commentary of Benivieni's poem. What we have given here, though necessarily superficial, gives some idea of the metaphysical background of his thought. The theory of love in particular was developed at greater length by Leone Ebreo.

3. Leone Ebreo

Though the development of Platonism in Italy took various forms, crossing the limited frontiers of philosophy into the arts, as well as into science, perhaps the most characteristic Platonist of the generation following that of Pico was Leone Ebreo (*ca.* 1460–*ca.* 1535). Leone, born Judah Abarbanel of Lisbon, is most celebrated for his *Dialogues on Love,* of which we have three, *Love and Desire, The Community of Love,* and the *Origin of Love.* The sources of his thoughts upon this subject lie clearly in the various writings of Pico, to whom he stands much as Charron stood to Montaigne, a systematizer of his master's philosophy. Since, however, Leone was a Jew and apparently faithful to the religion of his fathers, it is obvious that the applications which Pico made to his own religious beliefs will not be found in the disciple. In spite of these differences, a reading of the dialogues shows that he too was anxious to put beliefs which he accepted without question into rational form. The substance of the beliefs was biblical, the form was Neo-Platonic.

The philosopher who accepted the traditional views of God's relation to man was confronted by a curious paradox: God was held to love His creatures and his creatures were urged to love Him, yet the bond between them existed apparently on levels below that of the divine and, in the love of human beings for one another, there might be sin. One way out of this dilemma was to conclude that the word *love* was ambiguous and therefore to invent a new word for one or the other of the two relations. But it was not the custom at this time to adopt this solution, probably because of the long tradition which ran counter to it, or perhaps because religion demanded that the bridge to heaven must have at least one pylon in this world. But neither Plato nor Plotinus had spoken of either man's love for God or of His for man. The closest the former came to this way of thinking lay in his theory of man's love of the Good, and the closest that the latter came lay in his theory of the cosmic process in which all things above matter created something below them and similarly strove to return to the source of all being, The One. When Plotinus' One turned into the Hebraic-Christian God, and when emphasis was put upon man's mirroring of the cosmos, then it was not too far-fetched to interpret the *katabasis,* the Way Down, as procreation, as artistic production, as the realization of man's inner nature, as whatever was believed to be the differentia of the human race. And similarly the *anabasis,* the Way Up, was seen to be man's love for God and his desire to be reunited with Him.

Love in Neo-Platonism was always the force which impelled men to seek the Good. In Leone, as in Pico, love is a form of knowledge. One does not simply love in ignorance of what one loves; one must first know the object, as a true being—not a phantom—before one will be attracted to it. For love is different from desire. One may desire the useful without loving it. One may both desire and love the delightful, but once possessed it is no longer loved. One loves the Good and desires it, and the attainment of the Good is the true end of man.[12] This leads the question into a more concrete problem. What is one to say of one's love of and desire for health, children, one's husband or wife, or again, power, honor, fame, and glory? They seem on the one hand to be useful, on the other to be delightful. And when one realizes that their possession does not lead to satiety and boredom, one begins to wonder whether they are not also to be classed with the Good. Leone is quick to point out that many specific things fall into several classes. Thus health is not merely a corporeal value, a love of something purely material, but is accompanied by spiritual values.

Similar remarks are made upon the desire and love for children, for one's spouse, and indeed for all the other objects of love listed. Each may be thought of on the lowest, that is, the material plane; but all may also be esteemed for their spiritual value. Just what spiritual values are is not too clear. In the case of persons, one can spiritualize one's love by directing it to their souls rather than to their bodies, and presumably Leone was able to make such a distinction more easily than we can. Montaigne's comment in his essay on some verses of Vergil (*Essais* III, 5) rightly points out that we tear a man to pieces when we separate his soul from his body in this terrestrial life. At what point are we to mark off the frontiers of bodily delights and to map those of the soul? For Leone the moment comes when, as in friendship, one loves one's neighbor as oneself. A single love traverses the individuality of the two friends and unites them, removes the diversity of persons and corporeal individuation, so that a single soul inhabits both, and friendship which is good and honorable makes two persons of one and one of two. This is a step toward the love of God and no one will doubt that this is the end of the good life. For God in the Neo-Platonic tradition was, as we have pointed out, the source of both being and value, and in that mysterious union we have an exemplar of what men should strive to attain.

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[12] I have translated *onesto* (l'honnête) as the good. I suppose that "the honorable" would have done as well, though it would have perhaps accentuated the circularity of the theory. But it may well be that "the Good" is as inaccurate.

It will be observed that Leone's theory, like that of his intellectual ancestors, emphasized both the natural and the supernatural aspects of love. By this we mean that human beings, whether they are conscious of their philosophical problems or not, find themselves impelled to seek what they believe to be the good and that this very impulsion is also the possible source of their salvation. They may not realize all its potentialities. They may live a purely animal life. But even on the animal level there is a force which might be directed toward the attainment of human values. The love of God then is the perfection of man's human nature, as distinguished from his animal and vegetable natures. That the purpose of man is to become more of a man and less of a beast was a common assumption of all but the sceptical schools. They differed in what they thought to be man's essential nature. If one found it in the microcosm-macrocosm relationship or, in biblical language, in man's being the image of God, then clearly if man knew what God's nature was, he would also know his own.

Leone, unlike many of his teachers, went into details of moral education, sketching out a kind of ethical program for his readers. Thus he points out that the means which we have of reaching our supernatural goal are intellectual acts called art, prudence, thinking, science, and wisdom. Each of these requires both thought and action, but when one reaches wisdom one attains a knowledge of that which is above all material exigencies and enters the realm of the spirit. It is reached, however, only by mounting the ladder of knowledge step by step, attracted always by the beauty of the Ideal. Happiness will be the recompense of the long journey upwards, a happiness which consists in the complete realization of man's essential nature. It is interesting to observe that this goal does not entail the knowledge of each thing in its own individuality, for, as Leone points out, that would be impossible of any one man's attainment, but rather it is the apprehension of the general nature of all things, in which man approximates to the knowledge which may be attributed to God. This is very similar to what Spinoza, a century later, was to call the intellectual love of God or the view of things under the aspect of eternity.

To follow Leone's exposition of his entire system of philosophy is not necessary for our purpose, nor would it be possible short of a translation of his dialogues in their entirety. Certain details therefore must suffice. First, his acceptance of the Neo-Platonic hierarchies fused into one; second, his acceptance of Pico's idea of knowledge and love being intertwined inseparably; third, his acceptance of the presupposition of both Aristotle and Plato that the Good is the realization of man's essential nature. These three main points when developed give one the outline of his theory in general. His allegorical interpretation of the classic myths, which transmitted to posterity a tradition which found its expression in the visual arts, must be omitted, and we can only mention his general theory that knowledge is always contemplation, whether it is knowledge of material objects or of abstractions. He stands, in a way, as the most systematic of the Italian Platonists, a man in whom the *obiter dicta* and random expositions of his intellectual fathers are gathered together in logical sequence.

CHAPTER 3

The Sceptical Tradition in France

THE fate of most of the Italian philosophers was not such as to encourage further research into problems which might disturb the ecclesiastical authorities. Telesio, Pomponazzi, Campanella, Bruno, and Galileo, though the fountainheads of modern philosophy, had all been prosecuted, some had been condemned, and one had been burned at the stake. There need be therefore no cause for wonder at the decay of philosophy in sixteenth- and seventeenth-century Italy, if we mean by "decay" the cessation of discovery. The perception and investigation of new puzzles continued, however, in transalpine Europe, and it is a matter of choice whether one proceeds from Italy to the England of Bacon and Herbert of Cherbury, or to the France of Montaigne. If we have followed the latter course, it is because philosophic novelties are easier to perceive in France at this early date and because the influence of ideas ran on the whole from the continent to the British Isles rather than in the reverse direction.

Most historians would agree, I think, that one of the most eminent and influential thinkers of sixteenth-century France was Montaigne. But Montaigne, like all writers, had his predecessors. We shall first then discuss the French writers upon whom he relies most fully and then discuss some of his own ideas. But it must never be forgotten that in both countries men were given to reading the works of the Italians and that when they referred to Plato, and often indeed to Aristotle, they did so with an eye on the interpretations of these men written by Ficino and Pico. It must also be remembered that they were unusually well read in the Ancients and that even when they did not know Greek, they read Latin versions of Greek originals assiduously.

1. Montaigne's Predecessors

Whereas in ancient times scepticism was directed against the use and operations of the reason, in our own times it could also be directed against the propositions of faith. The Ancients having no orthodoxy, had no heterodoxy. The Moderns were in no such position. Moreover, as least until the Reformation one could not be sure that heterodoxy was merely contradiction of the words of Holy Scripture. There were sceptics who doubted the efficacy of reason, but accepted the truths of faith; others who doubted faith and accepted reason. Some who rejected reason substituted tradition, instinct, common sense, "the heart," the natural light, as well as, or in place of, faith. Some who set up reason as the sole test of truth interpreted it as the possession of the entire human race, a sort of communal reason. From the very beginnings of philosophy, there must have been some sort of scepticism, for no philosopher accepted as true the opinions of all men indifferently. The very distinction between appearance and reality is based upon the dubiousness of perception. Therefore when one discusses scepticism, one must clarify the target of doubt.

The history of the sceptical trends in sixteenth-century France is very obscure. One has, on the one hand, satirical accounts of science, such as appear in Rabelais, or in the writers of *Paradoxes.* One has, on the other, serious attacks on science, such as that of Agrippa von Nettesheim and his followers, who attacked rational science—and indeed in Agrippa's case the arts as well—because of the inconsistencies and disagreements among scientists, and all this is the interests of religion. There were men like Etienne Dolet who were accused of attacking faith on the basis of opinions which they published but which were not necessarily their own.[1] One of the best accounts which we have of sixteenth-century scepticism in France is found in a work by Guy de Brués, *Les dialogues . . . contre les Nouveaux Académiciens, Que tout ne consiste point en opinion,* first printed in 1557 and reprinted in 1587. This work is peculiarly interesting since it was in Montaigne's library and may well have been influential in the formation of his own opinions.[2]

[1] Dolet in his *Second Enfer* had included a translation of the Pseudo-Platonic dialogue, the *Axiochus.* The ending of this dialogue runs: "(La mort) ne peut rien sur toi, car tu n'es pas encore prêt à décéder; et quand tu sera décédé, elle n'y pourra rien aussi, attendu que tu ne seras plus rien du tout." (Spelling modernized.) It was this last opinion which brought Dolet to the stake, though it was ostensibly Plato's opinion, not his translator's.

[2] Scholars are fortunate in having a new edition of this work, carefully edited with an historical introduction and copious notes by Dr. Panos Paul Morphos. It will be found in the *Johns Hopkins Studies in Romance Literatures and Languages,* extra Volume XXX (1953).

The Academicians are, of course, the sceptics, and in the Dialogues are represented by Baïf and Aubert, both of whom actually were members of the Pleiade, though there seems to be no evidence that in real life they held the opinions attributed to them here. They are careful to protest their orthodoxy in religious matters in the usual fashion and a reader of the Dialogues might get the impression that Brués is simply playing with certain ideas in order to see where they would lead one. The first dialogue concerns epistemology, the second morals, the third jurisprudence. In a manner which was to be followed frequently, Brués contrasts man's life in a state of nature with his life in civilization. In a state of nature man lived as the animals do, following his appetites.[3] This happy time was brought to an end when men instituted moral codes, distinguishing between right and wrong, just and unjust, distinctions which are based upon nothing but vain opinion. "We ought," says Baïf, "to live in no way other than that which nature teaches us. But having by opinion distinguished the good from the bad, the right *(l'honnête)* from the wrong, vice from virtue, man has made himself his own enemy, and shown clearly what Ronsard has said in his poem, 'Of all the animals which live on earth, man is the most to be pitied, for he makes war upon his kind, himself against himself, and has in his brain no desire greater than to be his own executioner.' "

This ancient *topos* is taken up by Nicot, who points out that this would be all very well if we were still as nature made us. But since we are born in depravity, and have allowed our silliness to conquer our reason, it has become necessary to introduce laws to control us. This introduces the subject of the variability of laws. "The laws which will seem good in one state, will be found to be unjust and unreasonable in another, and those we think sacrosanct and equitable, others will hold as too rigid and full of superstition. Wherefore, what can they be but so much opinion and fantasy?" How then can they be deduced from reason? For reason must be uniform and its conclusions similarly uniform. But we find by an examination of various societies that what is vice in one is virtue in another, which is a sign that such things are ordained by custom rather than by nature.

If reason and nature are both uniform, then not only laws and moral standards but also even our sensory perceptions are suspect.

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[3] The history of this idea in the seventeenth century, when it had a certain prominence, will be found in my *The Happy Beast* (Baltimore: Johns Hopkins Press, 1933). The story was continued by Hester Hastings in her *Man and Beast in French Thought of the 18th Century* (Baltimore: Johns Hopkins Press, 1936).

The sense organs vary as much as values: here Baïf is made to introduce the ancient examples of the stick which appears bent in water though straight in air; Aristotle's example of the tactile illusion which is experienced when a ball is rolled between two fingers; the double vision of a drunken man; the shifting colors of a pigeon's neck; the visual size of the sun, and so on. To this Ronsard objects that the senses are never deceived when observing their appropriate objects; deception arises when a sensory faculty attempts to usurp the function of judgment. But it is precisely judgment, replies Baïf, which varies from man to man, even when based upon sensation. And that variation is the source of opinion.

There is no need for us to expound line by line the arguments in these dialogues, for they are now easily accessible. But just what purpose their author had in mind is not so clear. Agrippa von Nettesheim in his similar argument was trying to prove the futility of reasoning in order to restore faith to a higher position. If Ronsard is speaking for Brués, then Brués is attempting to refute all sceptical arguments in regard to moral matters, while accepting some of them regarding natural science. For Ronsard is made to defend a Neo-Platonic thesis that at least conceptual knowledge is certain. But conceptual knowledge is possible only if men have within themselves at birth a store of innate notions. "We have shown above," says Ronsard, "how the senses are never deceived in the knowledge of their appropriate objects; then that we have the common sense —which is as the center of all, and receives and discerns confusedly the things which it had originally known, and afterwards brings them to the imagination which examines them separately one after the other, upon which there comes the reason which considers them and examines them still more exactly, compares them to one another—relates those present with those past and those which are to come, abstracts the qualities, the proportions, and the other conditions, argues, concludes, and draws up universal propositions, which are the general rules by which we know the nature of things and learn the sciences and arts." It is at about this point that Baïf surrenders. Are we then to infer that Brués was arguing in defense of this type of Neo-Platonism, a Platonism tinged with many peripatetic colors? Or was his real intention to lay before his readers all that could be said in defense of scepticism while giving the appearance of refuting it? There is no way of being sure. If we wish to rely on the title of his work, then we must believe the former thesis; if, however, we consider the thoroughness with which he outlines the tenets of scepticism, and compare his technique with that of such a man as Pierre Bayle, we may infer that the arguments against the Academicians were insincere and a façade erected to conceal his true purpose.

2. MONTAIGNE

The *Essays* of Montaigne were never intended by their author to be more than a series of investigations into his own ideas and experiences, his tastes, his aspirations, his disappointments. He was not simply writing smart paradoxes, like so many of his predecessors and indeed successors, though the outcome of some of his essays is paradoxical. He is unsystematic, both in the composition of his books as well as in the individual essays. His fundamental question is the famous, "What do I know?" He gives no answer. It is, of course, impossible to read his mind and to determine why no answer was given. But is it not an answer to say that life is itself a question, a problem without final answer? Problems always arise within a context of rules and laws which seem firmly established, or at least sufficiently firmly to be accepted as working hypotheses. The rules in Montaigne's case were naturally those of Christian morality and Renaissance custom. But no man sensitive to the needs of human beings, one of which is to act as if each man were sovereign, can fail to see that no matter how sanctified a rule of life may be, it is bound to be infringed sooner or later. The man of learning becomes a pedant; the civilized man turns away from *notre grande et puissante mère Nature* and rejects those simple values which have always seemed to characterize the "natural man"; the scientist in apparent fidelity to his rules comes upon events which do not conform to the rules, and truth seems as elusive after his search as before; the religious man finds ecclesiastics who behave like pagans. It is such conflicts as these which raise the questions, and the thoughtful man knows that in a genuine dilemma no answer can be found. By a genuine dilemma I mean a situation in which each of two contradictory propositions seem equally justified. Montaigne was, as everyone knows, a man of great learning. Like Agrippa von Nettesheim and many others of the period, he saw that on most points which interested him opinion was divided. Thought then became an internal dialogue in which the proffered answers themselves turned into questions. Thus the *Que sais-je?* of Montaigne could not be answered, since its very meaning was that thought and life were problems, not solutions to problems.

In spite of Montaigne's reluctance to state a final position on most matters, some of his essays have been as influential as systematic philosophical treatises. Amongst these is the famous *Apology* *for Raymond Sebond* (Essays II, 12). Raymond Sebond was a Catalonian who taught in the University of Toulouse and who had written a book entitled *Natural Theology or the Book of the Creation* during the fifteenth century. The book came into Montaigne's hands through his father who before dying urged his son to translate it into French. For it seemed to him an excellent answer to the Lutherans whose doctrines, he believed, would terminate in atheism. Natural theology is the theology written in the Book of Nature. It is a set of arguments based upon the order of the natural universe, which is held to be sufficient to induce a man to believe in God. It is thus almost identical with the cosmological argument for God's existence. It is, as one sees, not dissimilar to St. Bonaventura's view that the first step of the mind to God is the sight of the beauty and order of the natural world. Why then did it need an apology? The answer lies in the suspicion, which all such books arouse, that their authors think the cosmological argument all that is required for religion. But Montaigne makes clear at the beginning of his essay that he does not share this idea. "It is faith alone," he says, "which embraces in a lively and certain manner the high mysteries of our religion." It is clear that few men have a faith so strong that it cannot be shaken by our love of novelty, the "constraints of princes," the ups and downs of politics. It is our very weakness then which requires such books as this. Natural theology should fortify our trembling faith and turn us away from heresy. And Montaigne, living in a time of rebellion against both political and religious authority, could cite striking examples of behavior which might well cause a man's faith in tradition to wobble.

But in addition to those who object to Sebond's type of argument on the ground that it is unnecessary, there are those whom Montaigne believes to be even more dangerous and who maintain that the arguments are weak. The best way to combat such critics is to point out to them that they are motivated by pride, to make them feel the emptiness and vanity and triviality of man within the cosmic theme. It is this aim which leads Montaigne into his famous defense of the beasts. With his extensive reading in Plutarch, Pliny, and Aelian, he was well furnished with stories of animal wisdom and goodness and expressed opinions about "our brothers and companions" which aroused furious resentment among more serious writers of the seventeenth century. We are accustomed to maintain that our distinguishing characteristic is reason. But after all, he maintains, what is our evidence that the beasts are irrational? They communicate with one another, if not with words at least with gestures and sounds. They even communicate their desires to us, as when they coax us or threaten us. Moreover, they clearly have foresight in that they stock up food for the winter, and a kind of prudence in that some of them, like bees, have well-organized states. The swallow's nest, the spider's web, both require intelligence for their construction. But not only do they reason, they also behave in a better manner than we do. They are not servile to one another, having no social distinctions; they cure themselves of their ills; and for some things, such as weaving and sewing, music, medicine, they have been our teachers. He cites instances of piety, fidelity, and gratitude on the part of animals and, in short, attempts, by using traditional anecdotes of animal sagacity, to prove that they are our equals in every way.

In treating the opinions of a copious, indeed garrulous, writer like Montaigne, one never knows how much is serious and how much humorous. There was a whole paradoxical literature which had grown up in the preceding century, the fame of which was very great, and at times one feels that Montaigne is simply writing in its vein. But his contemporaries took him with the greatest seriousness, and the attacks which were made upon the *Apology* were more often directed against this part of it than against the whole. For no Christian wished to believe that the beasts had souls, and it looked as if moral goodness and intellectual powers could not exist in a soulless body. He was, moreover, sometimes interpreted as if he were arguing that the animals were better cherished by Nature than we are. But that was not only not his purpose; he is quite explicit about it. "We are neither above nor below the rest." We all form part of a single cosmic pattern, an idea which goes back at least to the Stoics. But because of our pride and presumptuousness, we wish to separate ourselves off from the rest and endow ourselves with special gifts. Could he not have seen, however, that the religion to which he had given his allegiance had as one of its fundamental tenets the dogma that man was not on a level with the other animals, that in fact he should not be classified as an animal at all, but as a special sort of creature, made in the image and likeness of God? He alone had both soul and body: the beasts having only bodies, the angels only souls. Moreover, St. Thomas himself had said that when the animals act as if they had reason, it is because God made them to act that way just as He has filled Nature with other well-adjusted processes. Hence it is clear that on this point, which Montaigne emphasized with great force, he was in flagrant contradiction with Catholic tradition.

When he had terminated his long discussion of the sagacity and morality of the beasts, he said that, after all, the important qualifications of the good man were humility and submission. "The first law which God ever gave to man was a law of pure obedience. It was a bare and simple commandment which required no knowledge or discussion . . . From obedience and surrender is born all virtue; from excessive thinking all vice." Our primordial parents were tempted by the possibility of knowledge, and St. Paul has warned us to beware lest any man spoil us through philosophy. Only thus shall we achieve that tranquillity of soul which is agreed "by the philosophers of all schools" to be the highest good. The desire for knowledge is another instance of our pride, and few if any of us escape its force. Once we recognize our idiocy we shall cast off pride and accept the world and our place in it. The idiocy is obvious when we realize that Montaigne's scepticism is, like that of Pyrrho, based on the equal plausibility of contradictories. If Pyrrho was right, then our highest good, assuming that good is attainable, must lie outside the field of knowledge. Man by himself is nothing. What he possesses he obtains from God.

It was an easy matter for Montaigne to list the disagreements between philosophical schools, to show that what was true in the teachings of one was false in those of another. If all these doctrines are the fruits of reason, why then should we trust its guidance? Our main task in life is the pursuit of goodness and here we have the best of guides in the teachings of the Church. We need know nothing, in the sense of knowing the reasons for our choices and rejections; we need only follow the Commandments which have been given us by God. The rest is vain babbling of empty words and phrases. "The greater part of the world's troubles are grammatical. Our lawsuits arise only from debating the interpretations of the laws and most of our wars from our inability to express clearly the conventions and agreements of princes. How many quarrels, and not the least important, have been produced in the world from doubts of the sense of this syllable, *Hoc?*" Is it not better to admit one's ignorance and cease such stupid conflicts? For in matters of such importance we find our intellects too weak to comprehend the meaning of the questions. We are forced to interpret all ideas in terms of our forms of knowledge. But we have no way of knowing how adequate these forms are to subjects which transcend them. For that matter we are equally incapable of framing adequate ideas of the world of nature. Try, he says, to imagine how the planets move; you will immediately attribute to them springs, belts, and cogs as if they were parts of an artificial machine. All this sort of thing is poetry, metaphor, mythology. And Montaigne again lists page after page of our attempts to make sense out of the operations of the most familiar things. We cannot even think out satisfactory ways of keeping our bodily health or the government of our manners. Nor can we rely on sensory perceptions as our guides, for a comparison of our sensory equipment with that of the animals shows how feeble ours is. And, moreover, when we have a full inventory of sensations, we are as often misled by them as not. In view of all this, we can but trust in our Creator. For "Man cannot rise above himself nor above humanity, for he can see but with his eyes and grasp but with his hands. He will mount on high if God in some extraordinary manner takes him by the hand, if he abandons and renounces his own means and allows himself to be raised and exalted by means purely celestial. It is our Christian faith and not Stoic virtue which may aim at this divine and miraculous metamorphosis."

There would appear to be in this famous essay little to shock the most pious Christian, but Montaigne seemed to some of his contemporaries to have rejected too much. For the Church has never been willing to teach that faith alone, unaided by reason, would suffice for living a life of Christian virtue. Man, she has taught, is a rational animal, and a rational animal cannot toss aside that which distinguishes him from the rest of creation. But Montaigne by exposing all the weaknesses of rational philosophy left man on a level with the beasts whose intelligence and virtue, as we have seen, he was far from underestimating. How much of this was his love of paradox, it is hard to say. There was a streak of perversity in him which his most ardent admirers should not deny. The very fact that he was taking as the subject of his essays his own feelings, life, habits, hobbies, is enough to indicate that he was an eccentric. But on the other hand to place an individual's mind in the center of the universe, rather than a philosophic tradition or the teachings of sacred authority, was itself an original and fruitful starting point. It was based on his hypothesis that each person is his own center of experience and that he must found his philosophy on what he himself has discovered to be true—if only for himself. The depreciation of reason thus seems to have been a serious thesis of Montaigne's. It appears frequently in his essays in various forms. One of these forms is his inclination to cultural primitivism.

Montaigne's cultural primitivism [4] is expressed most notably in his essay on the cannibals (I, 31). It is typical of one reaction to the discovery of the New World and its inhabitants. Here were people who had lived in utter ignorance of the Scripture and outside the Church and yet who seemed to have certain admirable traits. From the days of Herodotus men had speculated on the value of civilization, and the tradition that the savage could be just as noble as the civilized man was a powerful one. For I suppose that in all periods people are to be found who are sceptical of the supposed advantages of the arts and sciences, of the accumulation of goods, of the cumbersome machinery of urban life. Even in the Middle Ages men turned to the simple life, to the untutored wisdom of the peasant. It was pointed out even by a pope that Christ had not chosen His disciples from among the learned, the *doctores.* And indeed if religious knowledge required extensive erudition, then clearly most of us would be impervious to its lessons.

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[4] For an analysis of the various kinds of primitivism and anti-primitivism, see Lovejoy and Boas, *Primitivism and Related Ideas in Antiquity* (Baltimore: Johns Hopkins Press, 1935).

The American Indian, according to Montaigne's informant, whom he is pleased to describe as *simple et grossier* and thus not given to learned embellishments, lived in accordance with perfect religious precepts, in communities well policed. He was savage only in the sense that wild fruits and flowers are savage: Nature without artifice has nurtured them. It is we, on the contrary, who ought to be called savage, since we have disfigured by our corrupt taste the goodness of Nature's products. The Indian lives according to Nature's laws, has no commerce, no knowledge of letters, no mathematics, no magistrates or organized government, no servitude or wealth with its accompaniment of poverty, no inheritances, no feeling for parenthood except that of the tribe as a whole, no clothes, no agriculture, no metallurgy, no use of wine or wheat. His language contains no words for lying, treason, dissimulation, avarice, envy, belittlement, or pardon. His land is temperate in climate; he has no knowledge of sickness; and "I am assured that none has been seen trembling, limping, toothless, or bent over with age." His food is simple, his house a long hut of bark. He sleeps in a rough hammock. He goes to bed with the sun and eats but one meal. Nevertheless he has his priests, makes war, scalps his enemies, and eats his prisoners roasted, though only for vengeance's sake. In spite of his defects, and Montaigne recognizes that such practices are far from admirable, he is no worse than we. Thinking of the wars of religion through which he had just passed, Montaigne writes, "I am convinced that it is more barbarous to eat a man alive than to eat him dead—to tear him apart by torture and machines while still capable of feeling, to roast him inch by inch, to give him to the dogs and swine to be bitten and slaughtered, as we have not only read about but seen only recently, and that not amongst traditional enemies but between neighbors and fellow citizens, and, what is worse, under the pretext of piety and religion—than it is to roast them and eat them after they are dead." The Indians may be barbarous in the sense that they act irrationally, but not by comparison with us. Even their wars are excusable, since they never engage in wars of conquest. They know that their own land suffices for their needs and have no interest in superfluities. In other words, the Indian, though he is far from perfect, is nevertheless more perfect than we. The great question, which was to be raised frequently in the years that followed and of which we have not heard the last by any means, was how could such perfection be attained without the teachings of Christianity. Does not Nature perhaps suffice? When this question was answered in the affirmative, and it was often so answered by men who failed to see the ambiguities of the term, the problem was to find examples of the natural. When the savages of the New World were known more intimately, they failed to meet the test. It was next agreed by some to look for Nature in the child. And finally, in the twentieth century, those who admired the savages and the child then turned to those whose reason had fled, or to the unconscious. The culmination of all this may be seen in our interest in automatic art.

3. CHARRON

The first and most influential of Montaigne's disciples was Pierre Charron, whose best known book, *De la Sagesse,* ran into forty-three separate printings between 1601 and 1880, of which thirty-two were printed before 1664. Surely few philosophical works have had such popularity. When one asks oneself what the cause of its success was, one can only conclude that the scepticism of Montaigne, presented in orderly and systematic fashion, satisfied some need of the seventeenth century. The need may well have arisen from the desire of justifying one's religious faith which seemed to be threatened by the emergence of rational physical science. As we have seen, Montaigne himself used his scepticism in defense of faith, but as we have also seen, it was not difficult to read him as a lukewarm apologist. In Charron there could be no doubt of where he stood. His attacks on what was called the reason were as vigorous as his master's, but his defense of the faith was clearer. *Sagesse,* which is usually translated *Wisdom,* does not mean intellectual wisdom but practical wisdom, and connotes the management of life without recourse to either passion or opinion, superstition or science. This use of the term was expressed in emblematic form in a frontispiece to the Bordeaux edition of the book in which *Sagesse* is represented as a nude woman, "as one who follows nature." Passion, Opinion, Superstition, and Science are beneath her pedestal in chains, and it is interesting to observe that the figure representing Science is reading a book on one of whose pages is inscribed the word *Oui* and on the other *Non*. Thus science or rational knowledge was thought of by Charron, as it was by Montaigne, as a mass of contradictions.[5]

There is thus at the outset a statement of the belief that we have a faculty of insight which is neither rational nor emotional, a kind of natural guide to truth which stands pictorially "above" them. Charron's task was to clarify its nature and to persuade us to follow it. Now the first chapter of his book points out that the only knowledge worth having is self-knowledge. Self-knowledge clearly does not arise from scientific investigations but from turning one's eyes inward and, by a kind of intuition, seeing what is there. No formal training is needed in order to obtain it; no books can discover it for one. Therefore it is open to all who seek it, as if it were a natural or innate propensity. Moreover, since man is made in the image and likeness of God, self-knowledge is the first step on the road to knowledge of our Creator—the echo of St. Bonaventura is not too faint to be heard in this. Nor can self-knowledge be procured through the aid of others; it must be found for oneself. One cannot know oneself by analogy or by the judgments of others; one cannot know oneself by some rare act of courage or justice. One's honors and other social recognition tell one little, nor do acts committed in public, where applause or disapproval may influence one. On the contrary, one must study oneself in private "by a true, long, and assiduous study of oneself, a serious and attentive examination not only of one's words and acts, but also of one's most secret thoughts (their rise, duration, growth, repetition) of all that takes place within one, even to one's dreams during the night, peering closely at oneself, palpating and pinching oneself to the quick." Charron then proceeds to draw up a diagram of five considerations which a student of human nature must take into account and which upon analysis develop into greater and greater detail. Such a student must not only make a general picture of human nature, but must also compare man with the beasts, must study one by one his corporeal and spiritual faculties, and finally his individual differences. Man is notoriously the most miserable and the proudest of creatures, full of vanity, weakness in the fulfillment of his desires and of his plans, inconstancy in shifting from purpose to purpose, misery in his birth and in his death: pain is his natural portion. The *topos* of man's misery goes back at least to the Pseudo-Platonic *Axiochus;* he is the one animal to whom Nature is more of a stepmother than a mother. But added to all these is the worst of all vices, pride. Though he is the most wretched of God's creatures, the most filthy with vice, yet he wallows in the presumption of being the crown of creation. "He is lodged down here on the worst and lowest level of this world, farthest removed from the celestial vault, in the sink and sewer of the universe, with the dregs and the slime, with animals of the worst condition, subject to receive all the excrements and ordure which rain down to fall upon his head, and lives but from that, and to suffer the accidents which come to him from all sides, and makes himself believe that he is the master in command of all, that all creatures—even those great luminous and incorruptible bodies, of which he cannot know the least power, and which he is constrained in amazement to admire—exist only for him, and are at his service." He has the foolish idea that the sun and the other heavenly bodies exist for his pleasure and to maintain him in life, whereas he is a beggar at the feast. He has presumption in thinking that he possesses knowledge, in praising and blaming what he does not understand, in trying to persuade others of his own predilections.

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[5] For an excellent, though very brief, account of Charron's contributions to philosophy, see Richard H. Popkin, "Charron and Descartes: The Fruits of Systematic Doubt," *Journal of Philosophy*, December 9, 1954. Popkin goes too far in asserting that Charron is "almost completely unknown and unrecognized," though it may be true that the younger generation of American philosophers is more ignorant of his work than their predecessors were.

To summarize Charron's long diatribe against human nature would require a complete translation of the book, which is itself a sort of compact anthology of all the classical diatribes on the same subject. Man as compared with the beasts is a poor, naked, weak, and foolish creature. All the arguments used by Montaigne to show the superiority of the beasts in their natural endowment, in their virtue, in their wisdom, are brought forth again by his disciple. Charron's catalogue of their points of superiority became the standard inventory. In fact, he concludes that they are so far above us that we should try to imitate their innocence, simplicity, freedom, and gentleness. It is for that reason that God Himself has commanded us to go to them for wisdom.

But when one considers the makeup of a man, one sees that he has a threefold nature; he is spirit, soul, and flesh. The spirit is as a spark of the divine, aspiring to heaven, yearning for the good. The flesh is the beast within us—here Charron seems to have forgotten the praises he has just lavished on the brute creation—rolling in the mire. The soul occupies a middle position, neither good nor bad but capable of becoming both. (What then becomes of either the theory of original and inherited sin or of the natural goodness of man?) Charron's program is to lay down a course of action by which man's soul will become good. He clearly cannot find it by skimming off the accretions of civilization and discovering man's original nature. For Charron is neither a lover of savages nor of the common man, who some seem to believe is a contemporary survival of unspoiled nature.[6] Hence he must find some set of standards that is supernatural and which man will strive to live up to regardless of either the promptings of his body or of his soul. This set of standards cannot be imposed upon a man from without, for in that case where would be its compulsive force? It must correspond to some felt need within the individual. Should one, however, think that a life of solitude, as led by the hermits, will reveal such standards, one is deceived, for solitude is the worst of counselors. Nor would the life of a communal society provide them, though there is no love of possessions and hence no jealousy in such a way of living. In fact, no order of life in itself is without its drawbacks, for each involves either the conflicts which arise from contact with others or the losses which arise from their absence. The problem is solved only when one realizes that our troubles come from the conditions of our lives, from our occupation, our social rank, our wealth, our intellectual interest, or from the passions with which we regard such things. Our duty, then, if we wish really to attain wisdom, is to appraise all supposed goods at their true worth, to discover by self-examination how true or false our values are, and thus to enable ourselves to discard those which are false. This can be done only through self-knowledge, which must be ruthless. It will lop off all consideration of external and social values and all internal prejudices. These prejudices have their source in our passions.

At this point Charron accentuates his stoicism by urging that a man who wishes to live a well-ordered life think of himself as a citizen of the world and not merely of his village. He will move in this direction when he notes the diversity of local customs and rules and (what amounts to the same thing) their lack of universality. They change as everything else in this world changes, and the lesson to be derived from observing their fluctuations is never to "espouse anything, to swear to nothing, to wonder at nothing, to be troubled by nothing," but on the contrary, to shrug one's shoulders and accept all that happens as the way of the world. To do this requires a strong will and one's will will be strengthened in inverse proportion to the number of things to which one is attached. Regardless of popular approval, we must above all keep ourselves in tranquillity and freedom. That is our peculiar and primary task. If this demands freeing ourselves from social ties, we must so act. This will be following the Law of Nature which is also the Will of God. Thus we shall reach a state of probity. The man of probity is good by nature and in accordance with his essential character. He follows the natural light.

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[6] Quite the contrary in fact. Like Machiavelli and Alcuin he inveighs against the proverb, *Vox populi vox Dei,* saying that it should be changed to *Vox populi vox stultorum.*

The natural light, which we shall meet again in the English Platonists, and which is presumably the same thing as Pascal's heart, which has its own reasons, when expressed is the Laws of Moses and, in fact, all sound law. The man who follows its beams needs no external guide. He is obeying a universal and eternal law which leads him quietly and soberly and never calls to its aid the artifices of legislators. That is why the Sages have called such a life one lived in accordance with Nature. But it is human nature, obscured and indeed buried under the accumulation of centuries of false tradition, which is being followed. We are called upon then, in fact, to throw off tradition and be ourselves, and the preceding parts of Charron's book turn out to be a description of those things which have deceived us about ourselves. Hence we may say that neither body nor soul is ourselves, but externals. The spirit alone is *we*. And our problem becomes that of finding our spirit under the coverings of the corporeal and psychic shell. That is what Charron must mean in his flat statement that "Man is naturally good and follows evil only for profit or pleasure." Man is synonymous with man's spirit. But Charron, like so many others who have pursued this course, does not explain how man acquires so many false and ruinous values. It is easy enough to say that we have been corrupted by the original sin of our primordial parents; yet they were at first natural and not corrupt. Would it not seem reasonable to believe that they would have followed the natural light, since they had no other to follow? They lived in blissful solitude in their Garden; they could have known no evil. How, then, explain their conversion from absolute goodness? Once evil entered the world, man could choose between it and good. Once passions and the influence of other men were possible, then man could choose to follow them rather than to walk in the paths of holiness and integrity. But one can hardly be expected to satisfy a desire which one cannot possibly entertain. Charron is no more successful in solving this riddle than anyone else. He has at least the merit of not stating it in terms which make its solution impossible. He thinks of man as he is at present. And at present he is a spirit caught between the millstones of body and the soul. He can liberate his spirit, that is, his real self, when he knows what it is, by denying the claims of the two parts of his nature which are variable and accidental.

The Sage will begin by his disgust with vice and debauchery and will in this way, it is hoped, attain innocence. He will then pass upward toward virtue by arming himself against the solicitations of the passions and by persistently denying them satisfaction. Finally, he will reach perfection when virtue has become his constant way of life and vice has lost all attraction for him. Perfection is like innocence in that both proceed "noiselessly, painlessly, and without effort." It is acquired either by grace or by long study of philosophy joined to a "fair and noble and strong" nature. For acquired goods are not so fine as those conferred by nature. Thus God is good in Himself, and only when we live up to the image of God which is implanted within us and which we essentially are, do we live in a state of perfection. This state can be realized only in the worship of our Maker. Yet such worship when it consists in piety alone is empty; it must be joined with probity. So much will suffice to give some idea of the practical outcome of this type of thinking.

We have perhaps expounded enough of Charron's book to illustrate his point of view and to show the outcome of his scepticism. Like his master, he was a devout Catholic and had no arguments to advance against either points of dogma or points of practice. He saw no inconsistency between his Stoicism and Christianity but, on the contrary, believed that his philosophy was an aid and support to his religion. He directed his scepticism, as he thought, against ideas that might weaken faith and never entertained the thought that, where faith was expressed in statements of fact, the same weapon might be used against it as against "reason." It was not remarkable that his work had the extraordinary popularity that it enjoyed. For it was fitted to serve as the layman's guide to a wise and decent life, was not intended to shock the sensibilities of the pious, was eloquent and learned, and had none of the traces of the pedant in it. The following century, however, saw in Montaigne the seeds of heresy, or at least of error. After dealing with another disciple of Montaigne, we shall turn to his opponents, who usually occupy more space in cultural history.

4. La Mothe le Vayer

Though Charron was by far the most popular of Montaigne's disciples, a number of other writers continued the sceptical tradition in the spirit of the author of the *Essays.* The most eminent of these men was François de la Mothe le Vayer (1586–1672) whose works, though not so frequently reprinted as those of Charron, were republished as a whole as late as the middle of the eighteenth century. Of these the most read were his *Five Dialogues* and the *Rustic Hexaemeron.* These two works, which contain the fundamentals of his scepticism, were brief, gracefully written, and contained little if anything which had not been previously said by Montaigne. He harps upon the disagreements amongst philosophers and scientists, upon the necessity for self-knowledge, upon the propriety of following the customs of one's people, and upon the uniquely satisfactory character of revealed truth. He thus dissuades men from pursuing rational science since it is superfluous as well as uncertain in its conclusions. The one knowledge which is necessary is self-knowledge, and that can be attained without the help of the philosophers.

"Nature" thus to him, as to Charron, was the essential nature of man. When Charron urges men to follow Nature, he is not setting up the animals and the savages as exemplars, except insofar as they demonstrate the folly of civilization. So when La Mothe le Vayer urges men to follow Nature, he assumes that within each individual there is something—that which was called the Spirit by Charron—that is sufficient to guide us in our conduct and which requires only the education of rejection. Here again we come upon a man living in a highly artificial society who maintains that its artifices are not only useless but harmful, whether they lie in the field of knowledge or in that of behavior. It is as if he were taking the Augustinian program, *in interiore hominis veritas,* and making it his own. But of course the outcome is only faintly similar to that of St. Augustine. He insists that the very desire for knowledge leads only to misery. For no one is content with a modest amount of the commodity; all want as much as possible and the end result is a desire to know things which are beyond human capacities. *Qui addit scientiam, addit atque dolorem:* he who increases knowledge increases also grief. We are simply too weak to attain the heights of divine and immortal things unaided by revelation, and our most vicious tendency is to think we can. One can learn more by prayer than by study. Logic is but the art of making the worse appear the better reason. It should be replaced by "natural logic," that is, common sense. Our author is none too clear about what he means by "common sense" and all of us are aware of the stupidities of generally accepted notions. Furthermore, La Mothe le Vayer is himself no lover of the People. But since, like Charron and Montaigne, he believes that in most matters custom will take care of our practical problems and that theory is largely a waste of time, he probably thought that common sense would not invade the field of science.

The one benefit which man can derive from scientific studies is knowledge of himself, for we are miniature reproductions of the cosmos, being each a microcosm. We shall see in its results the beautiful order which the Creator has designed and thus be led to a knowledge of God's nature. "I should be as willing to believe that the letters of the alphabet thrown together in a bag and then poured out on a table, would have been able to compose by chance Homer's *Iliad* or the most beautiful tragedies of Seneca," as that the universe is the result of chance. But this leads us to assert that the inner purpose of the universal order is beyond our reach and we should rather attempt to seek the will which lies behind it, not the reason. All we need to know is that a universal connection exists among things, and not precisely what that connection is. It should be observed at this point that the connection in La Mothe le Vayer's mind is a teleological connection, not a mechanical. All the laws of nature, insofar as they are simply mechanical causal laws, will never reveal why they exist in the sense of what purpose they achieve. That is a divine and never-to-be-revealed mystery. But that there is some such purpose seems to him to be self-evident and he never discusses it. Hence we must resign ourselves to ignorance and submission to God's will. He gives a curious reason for forbidding us to search farther into God's purposes: the scriptural command to accept the laws of our earthly sovereigns without question and to make no attempt to penetrate into the secrets of their hearts. "The heavens for height, and the earth for depth, and the heart of kings is unsearchable." Only the prophets to whom special revelation has been granted can from time to time speak of such things.

At this point La Mothe le Vayer introduces the *topos,* which had become a commonplace by this time, that in some things the beasts were better off than we. They conduct their lives without deliberation, having a kind of innate good sense which serves as their guide. If they can accomplish their ends without reasoning and taking thought, why cannot we do as much? But no, we insist on useless complications. We could easily avoid doing the things which demand the succor of the sciences if we would only follow good sense, but in our foolishness we prefer not to. The heights of our stupidity are in our attempts at rational ethics. The facts are, he says, that every system of ethics is a reflection of local customs and, when we begin to reason about them, we advance theses which are patently absurd. He has no difficulty in indicating the conflicts in ethical systems, in showing that one man's good is another's evil, in pointing to cynic anecdotes which seem disgusting to him and which, if he had not left them in Latin, would seem equally so to us, to defenses of all the vices, and finally to the despairing cry of some ethicists that the very terms of ethics are but the flatulence of empty heads. What then is a man to do? One should stop discussing such matters. As Galen said of poisons, the more one talks of them, the more instruction one gives to the depraved. So with vice. We know what goodness is; why discuss it? We have only to follow the Commandments as revealed in scripture and not trouble our head with why's and wherefore's.

It is perhaps obvious by now that the literary skill of La Mothe le Vayer was of more importance than his philosophical. He was clearly a popularizer of certain sceptical commonplaces, such as the contradictions between philosophical and scientific schools, the conflicts in ethical theories, the wearisomeness of all discussion. He simply points out in his numerous works that we invent our own troubles by our pride and our vain desire to know more than we can ever find out. Though it is not our purpose to quarrel with the men whom we discuss, we should indicate the fundamental weakness of the position. There is always one answer to any question which is indisputable: God so wills it. Whether we are asking about the weather, the fall of bodies, the courses of the planets, or the general laws of gravitation, we can always quiet our anxiety by this answer. But to give it means never to ask any questions whatsoever. For the technique blocks all inquiry before it begins. We can always wait to see what the morrow will bring and make no preparations to meet it. We can resign ourselves to ignorance, both theoretical and practical. But man seems to be an animal who wants the impossible and keeps pushing the limits of knowledge farther and farther back. The question of whether we are any happier because of our conquests over ignorance may be disputed. But the question of whether we would be happy if we did not raise questions can be answered with a flat negative. The sceptic of this type might well wonder why we want to know, whether the search for rational truth is not an intrinsic part of human nature, like our animal drives. In any event, the history of Western man is also the history of his intellectual adventures and, though it is often pathetic and indeed tragic at times, it is part and parcel of our being. It may have been wrong of our primordial parents to want to be as gods knowing good from evil; but then it was wrong of them to be human beings.

Just what was the purpose of La Mothe le Vayer is doubtful. Like Montaigne, like Charron, like Sanchez with his "That nothing can be known" *(quod nihil scitur)*, which appeared as early as 1581,[7] like Bayle in the next century, his sincerity has always been doubted by some historians. He maintained that his scepticism was the soundest foundation for Christian belief. But the temptation is always great in such cases to argue that he was more interested in showing the absurdity of Christianity than in providing a sound basis for it. For if faith is inconsistent with reason, the conclusion will be that it is irrational, and what justification will we have for believing in one interpretation of sacred texts than in another? If the subject matter of faith is different from that of science so is that of art. Yet whenever we make any kind of statement, whatever it is about, we expect it to conform to the laws of logic and not be either internally inconsistent or inconsistent with other statements that we have previously accepted as true. The more reasonable path for the defender of the faith would seem to be that of the mystic, who admits that what he knows is immediately given and for that very reason incapable of being articulated in rational form. The paradoxes in which he is likely to state his knowledge are purposely paradoxical. He is like the man who would like to describe the color red and resorts to saying that it is neither blue, nor yellow, nor any of the other colors, and must be seen to be known. But that was not the position of a man like La Mothe le Vayer, for his good sense would not permit him to indulge in exercises that would have been repugnant to his mind. We are assuming that he was really sincere, as we also believe Montaigne and Charron to have been. The *honnête homme* is a practicing Catholic and does not disturb his will to believe by what he thinks are vain and foolish questions. Our author was pre-eminently an *honnête homme* and his main arguments are directed toward satirizing those who are silly enough to bother their heads about questions which are not properly those of a man of "wisdom."

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[7] Though Sanchez undoubtedly had great influence on French scepticism, we are omitting a detailed examination of his doctrine here. It followed the usual course of apparently justifying faith by deprecating reason.

CHAPTER 4

Descartes and the Cartesians

THE reaction to the sceptical influence of Montaigne and his followers was not slow in coming. In 1617 appeared the *Banquet des Sages* by the Jesuit father Garasse, to be followed in 1624 by his *Doctrine curieuse des Beaux-Esprits de ce Temps ou Prétendus Tels* and an *Apologie*. These were all violent and indeed abusive attacks on Charron, whom Garasse believed to be worse than either Vanini or Théophile de Viau, both celebrated for their impiety.[1] These books were the call to battle; and though Garasse himself would have disdained being an innovator in philosophy, innovation being but another name for heresy, since he was largely responsible for what might be called the Counter-Reformation in French philosophy, it may be of interest to point out what his complaints actually were.

The general principle of the disciples of Montaigne, he maintains, was that "there is no other divinity nor sovereign power in the world than Nature, whom one must satisfy in all things, refusing our bodies and our senses none of their desires." Not even La Mothe le Vayer really said anything remotely resembling this, and, as for Charron, we have seen that his conception of *la Sagesse* was simply that of the Stoics. Garasse, however, was not one to be impeded by evidence, and he proceeded with his attack by pointing out that behind this general principle lay the following presuppositions: (1) God and Nature are identical. (2) God-Nature loves all that it has made: man's soul, his body, his senses, his pleasures, meat, and drink. (3) Nature has put us here to enjoy her treasures. This is proved by a comparison of ourselves with the beasts. (4) Man is Nature's masterpiece and therefore should enjoy the benefits of his rank. (5) Therefore we should deprive ourselves of no pleasure. Behind all this lies a vagueness in the meaning of the term "Nature." Here Garasse was on firm ground and many of his successors were to point out how ambiguous the term was. But unfortunately Garasse, instead of analyzing its various meanings, contents himself with vulgar abuse saying that his opponents, by using this term, mean that "God is the belly, the lungs are His temple, the stomach His altar, and His priest the cook; the Holy Spirit is kitchen fumes, the chrism their condiments, and belching the old prophecies." For this reason the followers of Charron are justified in giving in to their bestial inclinations, and evils of all kinds, swearing, and sacrilege are approved. In short, such people want to reduce humanity to the level of the brutes.

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[1] Vanini (1585–1619) was an Italian freethinker who claimed to be a disciple of Pomponazzi. His views, which are frequently concealed under the protective coloration of rhetoric, were believed to be anti-Christian, with the result that his tongue was cut out and he was burned at the stake. His *De admirandis naturae reginae deaeque arcanis* (1616) was actually passed by the Sorbonne before being condemned and burned. One wonders today at the feebleness of faith which was unable to stand a book of this sort. Théophile was one of the Libertines, a man who wavered between Protestantism and Catholicism, like so many other philosophers of this time. His philosophical importance was relatively slight, though his condemnation was actively attacked. There can be little doubt about the obscenity of his writings and those of his fellow Libertines, but it was much less than that of some of the Italians of the previous century who enjoyed the friendship and protection of those high in the councils of the holy. In spite of the ups and downs of Aretino's fortunes, if an example is needed, he suffered no such fate as that of Vanini.

Against this Garasse sets what he calls the true meanings of "nature." They are: (1) "The order and governance of secondary causes which follow their course in complete dependence on the primary cause which controls the great master machine." This is, "so to speak," the will of God. (2) "The inner principles of things, as when we say that it is the nature of birds to fly." Thus even supernatural things have their nature. (3) The peculiar inclination, good or bad, which leads men to do this or that, as when one man has a studious, and another a warlike, nature. This nature should not be followed when moral questions arise, for if it is, then the worst excesses of bestiality may follow. It is doubtful whether Montaigne would have disagreed and certainly Charron would have been in complete agreement with this. For, as we have seen, to him man's nature was neither his soul nor his body but that which he called the spirit. Nevertheless, the apology for the beasts, the dispraise of man as worse than some of the beasts, the anti-intellectualism of the sceptics overshadowed their religious piety. Even Pascal, whose attacks on rational theology were as severe as Charron's, had only mild praise for Montaigne, and he became the whipping boy for the Christian apologists throughout the century.[2] Few, however, were to descend to the depths of abuse and slander that Father Garasse found appropriate.

1. Descartes

It was the lot of Descartes to institute the reform in philosophy which clearly was needed if that subject was not to disintegrate into literary flourishes. Descartes was, as everyone knows, a great mathematician, an influential physicist, and one of the clearest minds that France has ever produced. Like the Renaissance Italians, and Bacon in England, he believed in the necessity of making a fresh start and in establishing philosophy upon a basis of certainty which could never be shaken. Oddly enough he seems to accept the method of the sceptics, doubt, but he develops it in a manner which leads to its very antithesis, at least in his own opinion. The method is set down in his *Discourse on Method* which appeared in 1637. It is the one part of his philosophy which survives.

The method consists in the following steps: (1) Never accept anything as true except that which was so clear and distinct "as to exclude all doubt." (2) Analyze all ideas as far as possible. (3) Arrange all ideas in what he called the order of simplicity, that is, from simple to complex. This order turned out to be that of a formal system of mathematics, where the premises are held to be simpler than, that is, logically prior to, the conclusions. (4) Make careful and, as far as possible, complete enumerations and reviews of ideas thus obtained in order to be sure of having omitted nothing.[3] No argument is needed to show that in the statement of this method Descartes made certain assumptions which he never doubted. One was the possibility of attaining an intuition of certain truths; that is, there are certain ideas which need not be grounded on observation or perception or logical inference but which are immediately known to be true. In his case, as is well known, the fundamental truth was his own existence, which he intuited in the very act of doubting. Here, whether he knew it or not, he was repeating an argument used by St. Augustine and Campanella. But even Montaigne and Charron, when the former turned his eyes upon himself rather than upon anything else, and the latter when he insisted that self-knowledge was not only the most desirable knowledge but also the only sure knowledge, seem to have anticipated Descartes.[4] It should not be forgotten that, when Descartes argued to his own existence from his process of doubting, he himself understood that as a formal argument the conclusion was a *non sequitur*. He was conscious of himself doubting; he did not deduce from the doubting process that there must be a doubter. Self-awareness then was the start of his philosophy, but why he could believe, for instance, that his intuition of himself was any more reliable than his intuition of a color or a sound, he does not make clear. It is true that he points out the possibility of his being deceived into interpreting a dream as a reality, but such errors arise only when the process of interpretation sets in. So long as a person aware of a color attributes to that color nothing more than he perceives, he is, it would appear, on as firm ground as when he is aware of himself.

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[2] Chapter vi of my *The Happy Beast* (Baltimore: Johns Hopkins Press, 1933) deals with attacks made upon Charron and Montaigne insofar as they praised the life of the animals. Alan M. Boase, in *The Fortunes of Montaigne* (London: Methuen & Co., Ltd., 1935), gives a detailed account of Montaigne's reputation in France from 1580 to 1669. His book is indispensable to a knowledge of how a man's thoughts may be interpreted by his contemporaries.

[3] This method, as Professor Leon Roth has shown in his book, *Descartes' Discourse on Method* (New York: Oxford University Press, 1937), had striking similarities to that of Bacon.

The second step in his method assumes that ideas can be analyzed into simpler, that is, logically prior, ideas. Here the word "idea" must mean what later was called a proposition or a judgment or an assertion, a set of words which could be true or false, not a sensory quality or even the perception of a "thing." Hence when one came to analyze such ideas, one had to have faith in the processes of analysis which meant, in the long run, faith in logic. The result of the analysis would be a set of ideas which were logically independent of one another, did not stand in a relation of antecedence and consequence. A great mathematical genius like Descartes could probably reach a state of certainty in such affairs, but one has only to think of the attempts which have been made to prove the parallel postulate of Euclid to realize that certainty about logical independence sometimes has to be established by logical proof. Moreover, we now know that when we are defining terms which are to be used in a formal system, it is sometimes a matter of indifference which we take as indefinables and which we define. Thus the logical order does not necessarily arise out of absolute necessity at all, but may be determined by other considerations. Finally, when one comes to reviews and enumerations, one is blocked again by one's own psychological incapacities. One may accept the warning that reviews and enumerations should be complete, but is one ever sure that they actually are? Descartes himself realized that his hope of founding natural science on his method was futile when he admitted that existence could not be demonstrated by purely logical methods. This, as Professor Roth pointed out, was the eclipse of the method, for the kind of truth which Descartes wanted was actual, not logically possible, truth. If it had been possible to make enumerations and reviews so complete that one might be assured that nothing was omitted, then why did he not see, when he was formulating his method, that mathematics had to be supplemented by observation or experience?

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[4] For the history of the *cogito ergo sum*, see Blanchet's *Les Antécédents historiques du "Je pense, donc je suis."*

Behind all this lay a few other ideas which Descartes never doubted. Among them was a belief in the natural light. All men, he believed without question, had the same power of reasoning and if they would reason would all agree. This could only mean that he never suspected the possibility of the postulational method but thought that there was a set of self-evident assertions whose truth was accessible to everyone. This is no doubt due to the common belief that the axioms, definitions, and postulates of plane geometry were not only self-evident but uniquely so, and to overlooking what should have been obvious: that men when they become of interest to philosophers have minds and ways of thinking already set in directions determined as much by their education as by an inherent logical character. I do not attempt to deny the relevance of the laws of thought to right thinking. But thinking, however mathematical, does not proceed automatically. Though our methods of reasoning may be universal, it is we who orient them toward demonstrating certain truths which, for one reason or other, we feel impelled to demonstrate. The *lumen naturale,* or natural reason, did not prevent Descartes' predecessors whom he was interested in refuting from arguing about essences, powers, entelechies, sensible species, the infinite and the infinitesimal, the plenum and the void, the teleological structure of the universe, as if what they said would be clear and unquestionable to others. Are we to assume that our predecessors and our adversaries are all fools? On the contrary, they, like us, must know ahead of time what they want to prove; and though they may prove or disprove it in the same logical manner, when they come to apply their proofs to the world of existence, they are forced to introduce new postulates about the way in which that world actually behaves.

We see this at work in Descartes himself. After he had asserted his own existence, what was he to do next? As he develops his argument in the *Discourse,* he says that he next observed that his self was a thinking being and therefore had no need of place nor of any material thing, a body. But what is the logical, as distinct from the empirical, ground for believing that there was any such thing as a body? The concept of a thinking being, as he says himself, does not entail or imply or even suggest the idea of a body. We have bodies, to be sure, and we are aware of them. But we do not and, Descartes insists, cannot deduce their existence from the existence of our minds. In fact, if Descartes was sincere in his unwillingness to contradict any of the teachings of the Church, he must have believed that both God and the nine choirs of angels were minds without bodies. Again, when he moves on to prove the existence of God—by whose existence he would be able to prove that of an external world—he does it not because the idea of God is logically implicated in the idea of a thinking subject, but because he has an idea of God and wants to see whether it can be substantiated or not. Similar remarks could be made about each step in his beautifully organized discourse. For how could it be otherwise? There is in each step of reasoning a psychological intervention, which may be simply the suspicion "could I or could I not prove *P* or *Q*?" That suspicion may be awakened by what one has already proved, though no one really knows much about the rise of new hypotheses in the human mind. But whatever its cause, it is not simply the laws of logic. If it were, there would be no distinction between logic and that part of psychology which deals with reasoning and belief.

Other assumptions emerge out of Descartes' statements of his deductions. For instance, when he gives his proof of God's existence in the *Discourse,* he argues on the basis of the adequacy of cause to effect. The causal postulate of adequacy, as he and others used it, entails a belief that there must be an identity between a cause and its effects. Descartes has an idea of a perfect being, or as he puts it in the *Third Meditation,* of "a substance infinite, independent, omniscient, omnipotent, and by which not only I myself, but every other thing that exists, if there exist any other, was created." But Descartes himself is imperfect, finite, dependent, ignorant—in short, lacking the perfections of the Being of which he has this idea. How could he then be the author of such an idea? The problem becomes a problem only if one assumes the similarity of cause and effect to which we have referred, for if we assume that a cause need not have any of the properties of its effects, there would be no reason not to conclude that an imperfect being could not be the cause of a perfect being. I am not here arguing against the cogency of this proof; I am merely pointing to an assumption involved in it of which Descartes has no doubts and which he could have doubted. Similarly when his uneasiness about this proof is expressed, he raises the question of whether he himself could exist if there were no God, Whence could he have derived his existence? But whence does he derive the idea that he must have been derived from anything? Surely not from the simple idea that he exists as a thinking substance. There is nothing in that idea considered in itself that would lead one to believe either that it had or had not a beginning or end. Such notions come from experience and are not reached *more geometrico*. Finally, in raising the question of how God implanted this idea in his mind, he is assuming without question that it must have been implanted in him somehow, and when he comes to the inescapable conclusion that he must have been born with it already in his mind, since there is nothing in experience which could have caused it to arise, he is assuming that ideas come into the mind as reflections or images of things and events in the external world, or as compounds of such ideas, or as deductions drawn from ideas already acquired, as would be true in such arguments as the cosmological proof or the proof from motion as elaborated by St. Thomas Aquinas.

Yet Descartes himself is careful to point out that our ideas, i.e., perceptions, of material objects are far from being copies of the external things themselves. In fact, the only knowledge we have of things or their "affections" is that of their substance, duration, order, number, and "perhaps" some other general notions. These correspond to Locke's primary qualities and to Galileo's. They are what all material objects must have in order to be material, and the list clearly excludes those properties which we usually refer to as sensible qualities. As in Galileo, they are the properties which are sufficient and necessary for physics. This is in accordance with his theory that the material world is sufficiently characterized when it is given extension. For the modes of extension do not involve any colors, sounds, smells, and so on. Such qualities become ways of thinking and have no external correlatives which resemble them. We thus have the world composed of God, two substances utterly unlike, thinking and material, modes of each, and attributes of these modes. This classification of the subject matter of our knowledge took on importance since in the case of human beings two substances seemed to be in a causal relation and yet possessed of no common property. For when the will moves the body, the mind causes a material change, and when a sense organ is stimulated the end result is a mental state, let us say, a sensation of color. Yet Descartes elsewhere had assumed that such a state of affairs was impossible, and when he came to consider animal behavior, he denied that any thinking substance was involved at all. The animal was a pure machine so made by God as to seem to be actuated by thinking—consciousness—but really not so actuated. But if the animals could be thought of as machines, why then was it not possible for human beings to be so conceived also? In the next century such a conception was in fact maintained by La Mettrie and on arguments not very different, except in detail, from those used by Descartes to prove that animals were machines. But again Descartes, whether because of his religious beliefs or simply because of common sense, refused to carry out the argument to its logical conclusion. He just knew that the human soul and the body were in constant interaction. He also knew that he was under no obligation, religious or logical, to grant souls to animals. His famous solution of the problem, that the interaction took place in the pineal gland where the soul could act directly upon the animal spirits, was no solution at all, since the pineal gland is located in space, and if the soul is in space it is extended, and moreover the animal spirits, though about as immaterial as a gas, were not really immaterial. To assert such interaction entailed the abandonment of the causal postulate and to assert the possibility of causal relations existing between two radically different things. One could deny the interaction, or retain the causal postulate and deny the radical difference of soul and body.

Though Descartes' method did not work even in his own philosophy, since it could not lead into those regions where he admitted that experience was necessary (nor did he actually apply it fully, since he made assumptions which he never stopped to doubt), yet it was the most influential part of his philosophy. His physical theories about the vortices, his doctrine of animal behavior, his theory of psychophysical interaction were all hotly disputed and rejected. The theory of the subjectivity of what Locke was to call, using a medieval term, the secondary qualities, his psychophysical dualism, his theory of innate ideas, all had a certain vogue, but the method of doubt survived as long as men insisted upon certainty. But like many other methods of philosophizing, it proved too much and forced people into situations from which they could not extricate themselves. In our own times his proof of his own existence has been interpreted as a kind of subjectivism—or idealism—as if he were maintaining that self-existence, self-consciousness, egocentricity were the best starting point for all philosophy. Since it is very unlikely that Descartes, who thought that his life work was to be natural science, physics, was willing to maintain that self-awareness would be sufficient as a foundation for the laws of motion, astronomy, or even physiology, we do not ourselves subscribe to this interpretation of his philosophy. But, in any event, what his successors found most fruitful was the rigid mathematical method of reasoning, analysis of ideas, in short, the logical criticism of knowledge. His influence was that of a corrective to dogmatism and no one who had read his books could go back to uncriticized premises.[5]

Though the influence of Descartes on philosophy, if narrowly defined, was confined to his method, yet Cartesianism became a name for an attitude toward problems which were only indirectly associated with philosophy. Thus his theory of the passions had its echoes in literature and even painting.

The distinction between action and passion went back to the Greek language and is of course represented in all Indo-European tongues in the active and passive voice. In Aristotle the two correlatives were two of the fundamental categories of thought: *to do* and *to be done unto.* Descartes opens his treatise on this problem by asserting that "what the Ancients have written on this subject is so trivial *(si peu de chose),* and for the most part so little credible, that I can have no hope of approaching the truth except by straying from the path which they have followed." As a matter of fact, either Descartes did not know what the Ancients had said on this subject or chose to pretend that he did not, for accounts and definitions of the various passions are to be found not only in Greek and Roman literature, but also in medieval. It was in fact the passions which presented the most pressing problem to both Stoic and Epicurean, and the mastery of them is preached in some form by almost all traditional moralists. Descartes' innovation was to follow the grammatical hint that a passion always has a connected action; thus *to love* and *to be loved, to feel anger* and *to be the object of anger* are differentiated only, he says, by the end terms: the subject and the object. Yet since a passion is what one feels, the subject who feels the passion is not feeling the same thing as the object toward whom it is felt. This appears to be overlooked by Descartes, who wishes to analyze out the passion itself as if it were a thing, an independent object, inserted like a bit of matter between two persons.

Be that as it may, Descartes next attempts to discover what role the body plays in passion and the soul. If we come upon anything which may be attributed logically or empirically to soulless matter, then we must not attribute it to the soul. The bodily heat is such an attribute. And since many of the movements of our bodies are caused by the bodily heat and the animal spirits which it discharges from the blood and which move upward to the brain and thence to the various muscles, all that is left to the soul is thought, which includes psychic acts and passions. The former are all voluntary and are initiated within the soul; the latter come into the soul from external sources through perceptions. The former may also terminate in the soul, as when we love God or reflect upon immaterial objects, but frequently they terminate in our bodily organs, as when we will to move an arm or leg. But usually we do not call the former passions, since we are more accustomed to attending to our part in their formation; nevertheless it is simply a matter of terminology by what name we indicate them. Analogously we refer to the external world those perceptions which have their origin therein. But some perceptions we refer only to our soul, which are those such as joy, anger, and similar feelings. In essence these are identical with the passions which we refer to the body or to the external world, but we think of them as different because we are not aware of their cause. It is those passions which we are used to referring exclusively to the soul which Descartes proposes to discuss. He defines them as "perceptions, or feelings, or emotions of the soul, which are peculiarly related to it, and which are caused, maintained, and strengthened by some movement of the spirits."

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[5] I have tried to expand upon our debt to Descartes in an article published in 1950, *Homage to Descartes,* printed in *Philosophy and Phenomenological Research.* I have dealt with his assumptions in "The Role of Protophilosophies in Intellectual History," *Journal of Philosophy,* December 2, 1948.

Now the active aspect of the passions lies in their power to incite us to certain appropriate types of behavior: fear making us wish to flee, bravery making us wish to fight. Descartes is careful to point out that the will is not determined to do the bidding of the passions. It is urged by them to advance and to retreat, but "so free is the will by nature, that it can never be constrained." Our choices are always subject to our power of decision, though the passions which are tied to the body, such as our perceptions of external objects, clearly are not. We can make our decisions by "considering the reasons, the objects, or the examples which persuade us (in the case of fear) that the peril is not great, that there is always more security in defence than in flight, that one will enjoy fame and joy at having vanquished them, whereas one could but expect regret and shame from having fled." No soul, he maintains, is so weak that it cannot attain to complete power over its passions; all that is required is patience and continued practice. For in the long run we are moved by the useful and the harmful.

It is on the basis of his general definition of the passions which are caused by the soul that Descartes proceeds to define each of them. The list is very long and it would be useless to repeat it here. But the manner of defining the passions follows a long tradition and is carried on by Spinoza, so that it may be worth while to give a sample or two. Wonder is given as the first of all passions and is defined as the emotion which we feel when we meet something new for the first time. This emotion arises without any thought of the utility of what we experience, and since the experience itself is novel, there is no opposite to wonder. Either we wonder or we feel nothing. "To wonder is joined esteem or contempt, according to whether it is the greatness or smallness of an object at which we wonder. And thus we can esteem or despise ourselves: whence come the passions and thence the habits of magnanimity or pride, humility or lowliness." These two samples show that, in defining a passion, Descartes believes that a judgment is necessary on the part of the soul itself. One does not simply and passively feel the emotion; one's estimate of the situation is essential. We must recognize the novelty of the experience; we must estimate the magnitude of the object. The emotion is determined in part by our thoughts, our estimate of the importance of what we are experiencing. This technique does away with the traditional split in the soul's faculties into the concupiscent and the irascible. It retains psychic unity while granting our intellect the power to distinguish between utility and harmfulness, greatness and smallness, and similarly with other differences. The utility of the passions themselves resides in their power to strengthen and preserve those thoughts which are good; their harmfulness consists in their doing the same for the bad. It is we who must master them, cultivate the useful, eliminate or try to suppress the harmful.

Descartes' influence was not limited to his theory of the origin and effects of the passions, but also to his description of what would have been called in the nineteenth century the expression of the emotions. Each emotion affects our bodily states; movements of the eyes, changes in the complexion, trembling of the limbs, languor, fainting, laughter, tears, groaning, and sighing, all following upon passionate experiences. This is obviously the very opposite of the James-Lange theory as developed in our own time, to the effect that such expressions are really the causes of the emotions rather than their outward results. In the modern theory there was little that one could do to fight against being overpowered by passion; in Descartes there was nothing to fear since we were in the driver's seat. All passions could be turned to a good end if we would only train ourselves to so turn them. But since the remedy for a passionate life requires forethought, "and industry by which one can correct the defects of one's nature, training oneself to separate within oneself the movements of the blood and the spirits from the thoughts to which they are usually joined, I admit that there are few people who have sufficient preparation for meeting every sort of experience and that those motions stirred up in the blood by the objects of the passions follow first so rapidly upon the impressions which are made in the brain and from the disposition of the organs, even when the soul plays no role in the matter, that no human being is wise enough to resist them if he has not enough preparation." But the fact that mastery over the emotions has to be learned does not mean that we ought to despair. As Spinoza was to say later, "All things excellent are as difficult as they are rare."

People who are not entirely innocent of the history of art and literature will perceive in this interest in the description of the passions a symptom of one of the consuming occupations of the Counter-Reformation. It should not be forgotten that the late sixteenth and early seventeenth centuries were periods in which Repentant Magdalens, Repentant Peters, Mater Dolorosas began to repopulate the churches and when the idea of sin and the need for penance became once more dominant. Whether or not this was because of the success of the Reformation, which proved that rebellion within the Church could succeed, the fact is that even in the American Colonies, the emphasis was upon man's innate wickedness, his estrangement from God, and the need of salvation. The paintings of the period with their exaggerated gestures, their rolling eyes, their hands lifted to Heaven, all arranged in S-like curves, show that gesture was becoming of more importance as an aesthetic manner than repose. The growth of the opera from Monteverdi's *Orfeo* on was rapid and in the direction of increasing emotivity. Whether one believed with Charron that the passions should be always dominated or with Descartes that they could be oriented either toward good or evil, one was interested in them and in their place in human life. Later on, in the eighteenth century, it was to be maintained that some of them had real cognitive power, could be followed as a guide to truth, and, though none of the great philosophers of the Cartesian school held to this opinion, it is true that their absorption in matters of passion directed men's attention to them and thus prepared the way for granting them supremacy over the reason.

In literature one sees their importance increasing from the early seventeenth-century French dramatists until Racine. I am proposing no novel opinion when I point out that Racine's genius lay precisely in giving to the passions an importance which they had never had before. The famous *tirade* of Hermione in his *Andromache,* in which she turns on Oreste, who had just killed

Pyrrhus at her instigation, and tells him that he should have known that her argument came from jealousy, is a case in point.

Ah! falloit-il en croire une amante insensée?
Ne devois-tu pas lire au fond de ma pensée?
Et ne voyois-tu pas, dans mes emportements
Que mon coeur démentoit ma bouche à tous moments?

That Oreste could not have been expected to know Descartes' *Les Passions de l'âme* may strike a modern reader as reasonable. But Racine, if he had not read the book himself—and I do not maintain that he had—had absorbed enough of its teachings through conversation to remember that "Jealousy is a sort of fear related to the desire of keeping for oneself the possession of some good; and that it does not come so much from the force of the reasons according to which one judges that it may be lost, as from the great value one sets upon it, which is the reason why one examines even the slightest grounds for suspicion and takes them for really weighty reasons." No one had described in such detail as Descartes the psychophysiology of our emotional life. In comparison with him Charron appears to be superficial and Montaigne too interested in aberrant details.

But Cartesianism as a social attitude was not exclusively interested in our emotional life. Far from it, Descartes' emphasis upon clear and distinct ideas became in time one of the principles of French literary criticism.[6] The hatred which the classical critics from Boileau to Voltaire expressed for the vague and imprecise is testimony to a new spirit which had entered French letters in the seventeenth century. Even an anti-Cartesian, like La Fontaine, could not escape this new spirit; and perhaps the greatest charm of his fables lies in their simplicity of statement, their absence of long and involved figures of speech, their exquisite clarity. Whether he is depicting an insect or a man, he gives him a character which suffers from no *intermittances du coeur.* Much of this came also from Descartes' assumption that the human reason was universally present in all men and that when they followed it, they agreed. Hence its dictates, when clearly presented, would be acceptable to all. As in the ancient Greek tragedy, people do not stand for themselves, but for humanity, and the classic Frenchman, the Cartesian, never questioned the principle that there was such a being as humanity. The reduction of all the variety of sensory experience to a few unified ideas, the emphasis upon the classical unities in the drama, may not have been the fruits of Cartesianism so much as of reading Horace's *Ars poetica,* but it was certainly harmonious with the Cartesian ideal. If it became possible for the French schoolboy to write analyses of the French tragedies, the possibility arose from their authors' having constructed their plays in orderly and logical fashion. In fact, the prefaces which Corneille and Racine printed with their plays are striking examples of what they thought they were achieving. That they were written after the plays is of no importance now. For us, their readers, they come before and singularly illuminate the action which is about to be presented. Not only do the characters, especially in Racine, express themselves with uncanny precision, they express their motivation, they analyze their states of mind, exactly as if they were having an *examen de conscience* in public. It would be absurd to maintain that the influence of Descartes was direct; on the contrary, it was filtered through the minds of the Jansenists and, if one book is wanted, through the Port-Royal *Logic.*

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[6] For an exhaustive study of Descartes' influence on French classical literature, see Emile Krantz, *Essai sur l'Esthétique de Descartes.*

2. Cordemoy and Malebranche

I trust that by now it is clear that Descartes' method of philosophizing was an attempt at pure deduction and that, at least in the opinion of the writer of this book, logic can neither reach existence nor give any intimation that beyond its subject matter lie other realms of investigation. But there was another approach to philosophy which made use of the method in a modified form. It made, so to speak, an inventory of the puzzles which rose to confront a man in his experience and, after the inventory was made, then set to work to see how far it could be organized in classes, according to a priori categories, and described in self-consistent terms. Thus even though one could not derive the notion of a body from the notion of a thinking substance, if one found a body empirically, then one could raise the question of what its relation might be to the soul. Descartes, it will be recalled, had asserted that the differentia of body was extension, the occupation of space, and this differentia made it impossible to conceive of any similarity between body and mind. After his views on such matters had been systematized and expounded in organized form to the intellectual public, a work which was faithfully done by P. S. Régis, an early Cartesian, Cordemoy undertook to iron out some of the difficulties in his master's solution of the mind-body problem. His book, *Le Discernement du corps et de l'âme (The Differentiation of*

Mind and Body), published in 1666, sixteen years after the death of Descartes, tackles this problem squarely.[7]

Cordemoy's little volume is divided into six parts, and interestingly enough its purpose is "to serve as a clarification of physics." The sections which interest us begin with the Fourth Discourse, in which he discusses the first cause of motion. Arranging his ideas according to the geometrical method, he lays down a set of axioms whose purpose is to prove that no body can be self-moved. His reasoning here is worth setting down, for it differs both from the Scholastic argument to a First Cause of Motion and also flatly denies Galileo's principle of inertia, which had been published a generation earlier. The Scholastic argument was based on the a priori principle that there must be no infinite regress; Galileo's first law implied that a body in motion would continue to move until stopped by an external force. Cordemoy observes that a moving body can cease to move without losing its corporeal nature; he assumes as an axiom that, "Nothing which a being can lose is an essential property of it." (On n'a pas de soi, ce qu'on peut perdre, sans cesser d'être ce qu'on est.) Therefore if a body can lose its motion, motion is not an essential property of bodies. Therefore, in the second place, no body could be the first cause of motion. In the third place, since there are only two kinds of substance, spiritual and material, an axiom which he obviously takes over from Descartes, the only cause of motion must be spiritual. And similarly the spiritual first cause must keep bodies moving. This conclusion appears to contradict common sense. For we seem to observe bodies bumping into other bodies and setting them in motion, as well as parts of bodies being moved and setting in motion other parts. But, he says, anticipating Malebranche and also Hume, when one stops to examine exactly what one observes, one sees that one observes merely a body in motion which approaches another which is at rest, the coming of the first body to rest and the initiation of motion in the second. That is, one sees a billiard ball approach another and touch it; one then sees the second move off. But one does not see the former actually give its motion to the latter. On the contrary we already know that only a spiritual cause can cause motion and though a spiritual cause cannot be seen, we have nevertheless reason to believe that it is the true cause. The material contact then between the two bodies is but the occasion for the true cause to operate.

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[7] Though the classic treatise on the history of Cartesianism is Bouillier's *Histoire de la philosophie Cartésienne,* A. G. A. Balz has recently published a series of essays on some of the minor Cartesians, which will prove invaluable to the person who does not have access to rare books. See his *Cartesian Studies* (New York: Columbia University Press, 1951).

But just as bodies cannot move one another, neither can our will move our bodies. Here Cordemoy parts company with Descartes. He cites four examples of bodily motion over which we have no control: (1) the motions of our bodies which occur before we have any will and the cessation of all motion, death, which cannot be brought about by an act of will alone; (2) that if we could initiate motion by an act of will, we could continue it indefinitely and upset the order of nature; (3) if we could continue motion indefinitely, we would certainly continue living; (4) if we were the source of our bodily motions, we ought whether old or young to move with the same alacrity, and the difference between weak and strong ought to disappear. The multiplicity of involuntary motions is so great that one is forced to admit the impotence of our will in causing motion and to realize that its relation to the body is precisely the same as that between two bodies. Cordemoy has no objection to speaking of psychophysical or other forms of causation as common sense does speak of them, so long as one understands that one is speaking loosely. It is our custom so to express ourselves but it is no more than habit. It has no philosophic, i.e., scientific, relevance. On the other hand, though our will, our spirit, does not move with our bodies, there is a spirit which does. That spirit, as might have been expected, is God. God therefore not only is the first cause of motion but the continued cause of it, and since all change is based upon motion, all change must come through the direct intervention of the Divine Will. This is the doctrine of Occasionalism.

Though this doctrine has seldom been taken seriously by philosophers other than its founders, it should not be overlooked that if causation is to be the passage of something from one being, called a cause, to another, called an effect, and if we wish to exclude from science all indetectables, we have in the Occasionalists our first specimen of those theorists who today are known as Operationalists. It is true that a thinker like Professor Percy Bridgman would consider that the First Cause was as indetectable as any secondary cause, but he would agree—or at least would have no reason to disagree—with the destructive part of Cordemoy's argument. Now it appears from a scrutiny of such arguments that their proponents take the slogan *ex nihilo nihil* literally. The effect, or at least that part of it which is of interest, must have pre-existed in the cause and have been transferred to the effect. So as far back as Aristotle we find a presupposition of floating qualities which appear and disappear here and there, now and then, sometimes existing potentially in a bit of matter, sometimes emerging into actuality. That motion was one of these qualities in Cordemoy's eyes follows from his proposition that it can be won and lost. It is treated as if it were a color or odor or shape, as the medieval philosophers treated them—sensible species preserving their self-identity through time. To trace the source of motion back to a spiritual cause which can never be observed is bad operationalism; but that was the least of Cordemoy's worries. He gave God a permanent function in the universe, ceased to describe Him, as Pascal said in ridicule of Descartes, as the mere donor of the first push to the world who then stepped back and did nothing further. Scientifically we could do no more than Hume or Bridgman would permit us to do: that is, to record the changes in things as they are observed in whatever regularity they may exhibit. But religiously he emphasized the continued presence of God both in the external world and in ourselves. For there is as much mystery in imagining a spirit moving a spirit as a body moving a body or a spirit moving a body or a body moving a spirit. Our willing to do something is the occasion for God to produce the effect which He wills; our sensations are produced on the occasion of some material influence affecting, as we say in common speech, our souls. But no real causal action is found in any of these cases except that of the one cause which is a real cause. The gulf between explanation and description is widening.

When one reduces all causation to examples of God's will, one is abandoning any explanation of a particular event, in any sense other than that it is something which regularly occurs under certain conditions. Cordemoy is interested in causation only insofar as Descartes' dualism presents a problem. The problem appeared to arise in instances of psychophysical interaction. Cordemoy's way out of the difficulty is to deny that causation ever takes place within the range of human observation. Removing causation to the realm of divine action explains nothing, unless we can know God's reasons for doing whatever He wills to do. But these reasons are believed to be beyond our understanding. Hence we can either resign ourselves to ignorance or to a simple description of the apparent regularities and orders which are open to our senses.

The Occasionalism of Cordemoy found its most influential exposition in the works of Malebranche and the Flemish philosopher Geulincx. Malebranche was first interested in Cartesianism because of the work *On Man,* a work which Descartes left in an unfinished condition. Like Descartes, he never applied his method of universal doubt to the truths of religion as taught by the Catholic Church, and consequently the propositions of religion furnished the problems of philosophy. As Jules Simon pointed out many years ago,[8] the three fundamental principles of Malebranche are: (1) that the soul is a thinking substance, (2) the body is an extended substance, and (3) the very idea of God is an invincible proof of God's existence. He seizes upon the absolute difference between matter and mind as fundamental to his philosophy and, rather than attempt to bridge the gap between them, he widens it until he satisfies himself that no interaction is possible without, as Cordemoy had said, divine intervention. Every instance of causation then becomes a sort of miracle, inexplicable and unpredictable. And he reaches this position by a series of arguments which, in the light of the presuppositions of his age, are irrefutable.

It is clear that a man given to formal reasoning as the correct method of philosophy and who terminates his reflections in such a theory must have a definition, if not a theory, of reason which is not that of the general run of mankind. And indeed Malebranche turns to Reason as a religious act. For to him the reason is the Word, the Logos, "and this same Word, made flesh, is the author and the finisher of our faith" (Heb. 12:2). Thus when a man reasons truly, he is simply allowing the God within him to speak through his lips. But it is also possible for a man to think that he is uttering the words of the eternal reason, when actually he is permitting himself to follow the dictates of his body. The search for clear and distinct ideas is the search for that inner truth of which St. Augustine had spoken, but it is always possible that it be obscured by prejudice, dark and confused sensory feelings, imagination, and the passions. In view of Malebranche's occasionalism, he might be asked not to give any explanation of our errors, for an explanation is the assignment of causes to that which is to be explained. Would this situation not entail the belief that God is as responsible for our errors as for our truths? This question immediately presents us with the central riddle of all who posit at the core of their philosophies an omnipotent God and an impotent race of mortals. The paradox of error is that involved in our presumed understanding of what the truth must be and our inability to attain it. We have, for instance, a pattern of logical laws into which all knowledge must be fitted, and we know that such a pattern is essential if we are to organize our knowledge. And yet we also know, and know it by means of that pattern, that the knowledge which we do possess will always fall short of the perfection which the pattern demands. Whence do we derive our standard of truth? For Malebranche we derive it from the illumination of the Logos in Whose being we somehow share. But just how we share in it is a mystery.

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[8] See his introduction to the two-volume edition of Malebranche, published in 1842, p. v.

It was characteristic of Malebranche to give his books titles which suggested a kind of intellectual hesitancy, which indicate the feebleness of the human intellect. They are searches, meditations, dialogues, conversations. The most famous is perhaps his *Search for the Truth,* which appeared in 1674.[9] Its subject is the "nature of man's mind and the use which he ought to make of it in order to avoid error in knowledge *(les sciences).*" It is thus another example of a theory of method. This methodology depends upon an assumption which Malebranche does elaborate, that the soul's relation to God is closer than its relation to the body. That is, a body is neither necessary nor indispensable to a mind. This thesis, which is simply stated and not defended, follows from the Cartesian method, since Descartes was able to define the mind without introducing any notions taken over from physiology, for in the idea of thinking there was no implication of extension. On the other hand, since we are made in the image of God and since our likeness to Him resides not in our bodies but in our minds, specifically in our reason and our love of the good, there is a closer tie between our minds and that of God than between our minds and our bodies. This truth has been obscured by the effects of the sin of Adam, which has given, as one of its sequelae, more and more importance to the supposed goods of the body. We spend much of our time in seeking bodily pleasures and in maintaining the health of the body, forgetful that their true felicity is to be found in spiritual health and perfection. We are then in a situation of delicate balance between God on the one hand and the world on the other. We can lean in one direction or the other, inclining either toward wisdom and perfection, which can come only from our union with our Creator, or toward worldly flattery. It is Malebranche's purpose to show his readers that neither our senses, nor our passions, nor our imagination can help us in finding the truth. The question is to demonstrate how truth can emerge into consciousness without the use of our corporeal apparatus.

Historically and apart from the Christian religion there were two reasons why men could believe in knowledge which had no empirical basis. The first was the psychological tradition, dating clearly from Aristotle, but with roots in Plato's theory of reminiscence, that the reason operated without using any bodily organs. The second was that the objects of reason were neither spatial nor temporal, but were timeless essences which formed propositions whose truth was independent of any person's perceptual experience. The second seemed to entail the belief that we could not acquire eternal knowledge from temporal events, for the temporal dimension or the date could not be abstracted from such knowledge and give us eternity. The objects of our ordinary experience, which is always spatiotemporal, were supposed to be individual concrete things which might vary from moment to moment and which in any case were in part determined by the individual perceiver's make-up. But truth is an affair of universals, not particulars; science is not history; logic is not description. Whence then do we acquire knowledge which has characteristics in complete opposition to those of our bodily life? Malebranche could not for obvious reasons accept the Platonic theory of reminiscence since it was based upon the possibility of the pre-existence of souls, a doctrine for which Origen had already been condemned by the Church. He therefore had to elaborate a doctrine which would be acceptable to the Church as well as to the laws of logic.[10]

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[9] We are, however, as far as possible, using the edition of Roustan and Shrecker which is based upon the sixth edition of the *Recherche de la Vérité,* published in 1712. This edition was corrected by Malebranche himself and therefore represents his most highly developed thinking on the subjects treated. Unfortunately only the first three books have been edited to date by Roustan and Shrecker.

The doctrine which Malebranche elaborated derived from Descartes in that both philosophers maintained the soul to be a separate substance existing in association with the body, and not the form of the body in the Aristotelian sense of the word "form." Since it was a separate substance, its attributes could not be caused by or modified by the direct action of any material substance, whether that substance was the body or something external to it. For this reason psychophysical interaction had to be abandoned, for the conception which these men had of causality, as we have explained above, demanded that only similar things could sustain the causal relation. Truth therefore had to be explained as inherent in the human mind and not as something received from the material world as sensations were usually supposed to be received. But if truth is an inherent property of the mind, error must be explained as a defect of the mind, not as the reception of erroneous stimuli from without. This Malebranche is only too happy to do since he has at his disposal the notion that man lost his perfection, and hence his natural ability to possess the truth, at the time of Adam's fall. Error then becomes the result of sin, for our minds are still free to turn toward truth if they wish. But they do not usually so wish, because of the corruption of human nature. God has given us a free will for this purpose and all we have to do to attain the truth is to try to perceive within our own mind those ideas which are clear and distinct. The two rules for intellectual and moral correctness are (1) never to give full consent to propositions other than those which appear so obviously true that one cannot refuse to accept them without feeling an inner pain and the secret reproaches of the reason, and (2) never to love a good absolutely if one cannot love it without remorse. The first of these rules clearly is an adaptation of that of Descartes. The second is formulated analogously.

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[10] As a matter of fact, like Descartes also, he did not succeed. Seven of his works were put on the *Index,* including the *Recherche de la Vérité* and the *Entretiens sur la Métaphysique.* Descartes' were proscribed *donec corrigantur.* But since they could scarcely be corrected without tearing the reasoning apart, the condemnation might just as well have been complete.

This conception of knowledge, as Malebranche admits, is grounded in the assumption that knowledge is a kind of apprehension, like seeing or intuiting. Knowledge is presented to the mind which has only to contemplate it. There is no difference, he insists, as far as our understanding is concerned, between a simple perception, a judgment, or an inference: in all these cases we look at the object of knowledge, we do nothing more. But when we make a judgment of any kind, the will acquiesces in what the understanding perceives. It assents or refuses assent. One makes a similar distinction when one recognizes a difference between seeing and believing. No judgment is made in the former case; it is necessarily present in the latter. Since this is a cardinal point in Malebranche's theory of knowledge, it may be well to quote his own words on the subject. "When," he says, "one perceives twice 2 or 4, it is only a *simple perception.* When one judges that twice 2 is 4, or that twice 2 is not 5, the understanding again merely perceives the relation of equality which subsists between twice 2 and 4 or the relation of inequality which subsists between twice 2 and 5. Thus the *judgment* on the part of the understanding is but the *perception of the relation which subsists between two or more things.* But *reasoning* is the perception of the relation which subsists, not between two or more things, for that would be a judgment, but it is the *perception of the relation which subsists between two or more relations of two or more things.*" Understanding then, he repeats, is simple apprehension; only the will judges and reasons, "basing its judgments voluntarily on that which the understanding presents it with." What this amounts to is that the objects of knowledge exist in a completely organized and unchangeable system of terms and relations. They form a world of their own which we have only to recognize. Our recognition or lack of it is attributable to our will. And thus both truth and error depend upon our willingness to assent to what is there. When philosophers disagree with this point of view, says Malebranche, it is because we are accustomed to assenting immediately to self-evident truths and hence do not perceive the difference between the act of will which is required for belief and the apprehension of that in which we are or are not to believe. We have only to think of the analogous situation in moral affairs where we perceive no goods which are self-evidently good, and then we shall see that an act of deliberate assent is needed to judge this or that act worth doing. It is because the will and the understanding are distinct that we can prevent ourselves from falling into error. If we had to assent to everything which the understanding contemplated, we should never be free from the possibility of falling victim to illusions and worse. But we are free. And hence we never are forced to assent to anything which is not clear and distinct.

Such ideas are those of mathematics, metaphysics, and a great part of natural science and ethics. But history, grammar, civil law, in short, all subjects which depend on the changing volitions of men, are but contingent truths. We should not despise contingent truths, for necessity sometimes demands our acceptance of them, and also, when enough are accumulated, a necessary truth may emerge from them. But if one is willing to discipline oneself to the strict acceptance of the rules which he has laid down, hard though that be, one will be rewarded in time. "A great number of people will agree with me that since M. Descartes in thirty years has discovered more truths than all the other philosophers, because he has submitted himself to this law, if several people would philosophize as he did, one would know in time the greater part of those things which are needed to live a happy life, as far as one could on an earth which God has cursed."

What then is the nature of the objects of our knowledge? Do we perceive by the understanding material objects as they are, the effects made upon our bodies and minds by these material objects, or by what are today called "scientific objects"? Is the panorama of perceptual things an illusion, like the veil of Maya? Is it a poor replica of Platonic essences which we may hope some day to see in all their splendor? We seem, when we have sensations, to be looking outward upon an external and independent world. We seem, when we perceive the relations between things, to be apprehending relations which we do not fabricate but which actually subsist among the things which are related. And finally when we reason according to the laws of logic we seem to be grasping the relations between propositions which we do not control. And yet if any of these assertions is true, how could we ever be mistaken about what we understand? Are we to assume, as some recent Anglo-American philosophers have assumed, that there is an objective world of errors?

Malebranche's answer could not be of the causal sort, according to which our ideas are generated by anything beyond them. For his criticism of the notion of causality was as harsh as that of Cordemoy. There could be no true cause of anything whatsoever other than God. "There is," he says, "but one true cause, because there is but one true God; nature or the force of each thing is but the will of God; no natural cause is a *true* cause, but only an *occasional* cause." For bodies have no power of self-movement, since the idea of a body does not imply the idea of motion. Spiritual substances cannot move them, for the idea of a spirit, that is, thinking, does not imply the idea of moving anything. By implication Malebranche means the necessary logical connection which can be apprehended to subsist between two ideas. Thus causation as we perceive it has no logical status; the relationship cannot be translated into logical necessity. But when one considers the idea of God, a being who is perfect and hence omnipotent, one sees clearly that it would be impossible for Him to will that a body be moved and that it be not moved. This follows not from what we feel but from what we conceive. All events, then, take place exclusively through the will of God, and the changes which take place in nature are a reflection of that will and of nothing else. This includes the changes which we think that our own wills produce. "The noblest minds are similarly impotent. They can know nothing if God does not enlighten them. They can feel nothing if God does not act upon them. They are incapable of willing anything if God does not turn them toward the universal good, that is, toward Him." They can, of course, sin, and if sinning is a power, then they have at least that much power. But for Malebranche that is insignificant. All else that we do is done by God acting through us. This follows because in Malebranche's eyes "a true cause is a cause between which and its effect the mind perceives a necessary connection." And "necessary" means "logically necessary," not "usually occurring," nor "always occurring."

The apparent psychophysical interaction, then, in which we all believe when we follow common sense, is an illusion. God moves our limbs when we will to move them; God gives us the sensory impressions which we think are produced in us by physical objects in the external world. The latter in only the most general way reproduce the objects to which we attach them. If we are foolish enough to substitute our sensory impressions for the laws of nature, we shall become immediately involved in all the contradictions generated by sensory illusions. On certain occasions God illuminates our minds with appropriate ideas, but it is our task to choose which we shall accept and which reject. There is a kind of psychophysical association which makes certain psychic events the occasions of certain physical movements, and certain corporeal events which make them the occasions of certain psychical changes, and we can count on the regularity of these associative laws. But there is a closer union between the soul and the universal reason which is God, through which union we perceive the truth and attend to what we will. But the ideas which we possess are neither produced by us nor by the objects for which they seem to stand.

As far as epistemology is concerned the world may be thought of as consisting first of God, the universal reason, an infinite system of general ideas. These ideas are analogous to the Platonic essences, immutable, nontemporal, and nonspatial. They are like mathematical entities which are linked together by the laws of logical necessity and are pictured as being not only arranged in logical order but being all enclosed—that is, implied—in one idea, as far as God's mind is concerned. These ideas, which alone are true, can be perceived by the attentive human mind which refuses to accept any ideas which can be doubted. It must also refuse to unite any ideas which are not implied one in the others or the others in the one. Thus no mind can unite the ideas of a thinking and an extended substance. There are also sensory impressions which are useful for preserving life, but which are entirely false for discovering the truth. They are not ideas in the sense that the knowledge which we obtain by intuiting the clear and distinct ideas is true. They are felt as "modifications of the soul," but are incapable of forming part of knowledge. Ideas alone are known; these modifications of the soul are merely felt. This distinction is fundamental in the philosophy of Malebranche and is the reason why he can speak of our having knowledge in God. Our ideas of the external material world, like those of our inner life are ideas, not sensations or passions, and ideas must be something which can be true or false, must state something, must sustain logical, not ostensibly causal, relations to other ideas.

It is this distinction which was to make a sharp cleavage between such an epistemology and that of an empiricist who saw the source of all knowledge in sensory impressions. The latter, colors, sounds, tastes, and the like, assert nothing. There is no necessary relation between red and green, red and sweet, hard and salty. They may occur together in experience or not, as the case may be, but one cannot derive one from the other by purely logical processes as one can derive the sum of the angles of a triangle from definitions, axioms, and postulates, which we have only to understand in order to see their implications. Moreover the empirical data of consciousness may vary from individual to individual, whereas the relations between ideas, as well as their meanings, are eternal and immutable.

Perhaps the clearest exposition of Malebranche's theory of ideas and of our vision in God is given in the *Search for Truth* (Pt. I, ch. 1). There he asserts that all philosophers are agreed on the principle that we perceive external objects only through ideas. We do not see the sun and the stars immediately, but indirectly through the ideas we have of them. In the case of the "modifications of our soul," they need no ideas to be known to us; they can be immediately perceived. On the other hand there are some spiritual beings—Platonic essences and mathematical objects—for which we do need ideas if we are going to know them. The only possible ways in which we can know material objects are the following:

1. By sensible species which they throw off
2. By the soul's producing them itself
3. By ideas which God creates every time we need them
4. By the mind's considering its own perfections and through them the existence of things
5. By seeing all things in God

Now since God must have in Himself the ideas of all the beings which He has created, and since "He is the place of minds in the sense that space is the place of bodies," the mind can see what there is in God "which represents created beings." That is, the mind sees in God the representative ideas of material things. To make this plausible Malebranche states that we perceive things first in general and only later in particular. In other words, we have first an idea, for instance, of caninity and then, on the occasion of meeting with a dog, we apply the general idea to it. This reverses the usual theory of knowledge in which the problem becomes that of explaining how we have general ideas since we start with only particulars. And it is also expected to explain how all ideas can form a single and uniquely consistent system. Moreover, if our stock of original ideas is a stock of universals, we may be able to explain how we can make deductions on a nonempirical basis.

Finally, though it might be believed that this theory implies that we actually see God when we perceive ideas, on the contrary Malebranche insists that even when we perceive eternal truths, we see only the ideas of them. For truth is consistency, or the "equality" between ideas; the ideas are real, but the "equality" between the ideas "which is truth" has no reality. "Thus . . . we see God when we see eternal truths: not that the truths are God, but because the ideas on which these truths depend are in God."

None of this becomes intelligible unless one is willing to agree that God as the Son is the Logos, that the Logos is a system of eternal truths contained in infinite being, that these truths are not abstracted from human experience of external objects, that our knowledge is acquired through ideas, and that truth is logical consistency. On this basis one can explain the truth of a person's knowledge as the coincidence between his ideas and those implied in the ideas of God. We must give up the notion of the reality of relations, which had been first established in Plato's *Theaetetus* and which became a cardinal principle of later Platonists. Whether it was also necessary to give up the notion of causal efficacy, I should hesitate to say, but once it was given up and the Cartesian method of doubt accepted, then vision in God could be defended. It was in fact an extremely ingenious theory.

Why the body and the mind are associated is left a mystery. In the *Metaphysical Conversations* (IV, 12) Malebranche says, "Do not ask . . . why God wishes to unite minds with bodies. It is a constant fact but one whose main reasons have been so far unknown to philosophy, and of which perhaps even religion does not inform us." The only likely reason which Malebranche tentatively offers is that God wished to give us a victim to sacrifice as He did for His Son. "He wished to make us worthy of eternal goods by a sort of sacrifice and annihilation of ourselves." [11] But it goes without saying that He could have arranged things otherwise. The psychophysical relation then becomes a religious mystery and, though the two beings act as if they were causally related, they cannot be. The outcome, which Malebranche does not draw, would seem to be that we might be able to study the regularities which are to be perceived in bodily, psychical, and psychophysical events and to plot them at least statistically. Yet, since the conception of science to which Malebranche clung was one of absolute certainty grounded in formal logic, such a study would not have satisfied him. The difficulty arose from the belief that both body and mind were substances, entirely different in their attributes, and yet somehow united in human beings. Spinoza, who had no religious scruples to prevent his carrying out Descartes' premises to their logical conclusion, was able to conceive of them both as attributes of a single substance, God or Nature. He thus could deny their interaction without denying causality.

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[11] He is less tentative in his *Christian Meditations* XI, 9.

One of the greatest sources of trouble to Malebranche lay in the Cartesian definition of matter. If matter is nothing but extension and if knowledge consists exclusively in deducing the logical consequences of our primitive ideas, then clearly nothing that is not implied in the meaning of extension could be known about the material world. And in that case force would become a surd. Motion was interpreted in accordance with his idea of matter as a body's being in different positions in relation to some other body at different times. But how it moved from position to position became inexplicable. If Malebranche had not had his religion to fall back upon and had been satisfied with a purely naturalistic science, he would either have had to accept the puzzle of motion as a puzzle or to introduce a new definition of matter. Again, if he had been willing to conceive of causality as something other than logical necessity, he could have laid down the foundations of a scientific psychology. One can scarcely criticize him for accepting the tenets of his religion, or for aiming at absolute certainty. But he might have seen that what he called with some contempt occasional causes would do very well for purposes of organizing knowledge. The set of theorems which composed Newton's *Principia* were precisely laws which stated regularities and did not deal with ultimate causes. But what a philosopher will consider satisfactory and what not, is a psychological question. In Malebranche's case one may hazard the guess that the religious aims predominated over the scientific; and since he believed his metaphysics to give a rational account of the fundamentals of Christian theology, insofar as a rational account of them was permissible, he was content.

3. SPINOZA

The problem of causation, which is central in the philosophy of Malebranche, was tackled also by Clauberg (1622–65) in Germany and by Geulincx (1624–69) in Holland and was tackled in much the same way as Malebranche was tackling it. But since they are both outside the main stream of the history of philosophy and also since one cannot discuss everyone, it is perhaps excusable to exclude them here. The most rigorous Cartesian, to whom causality was also a dominant problem, was Spinoza (1632–77), and since his *Ethics* is the dramatic culmination of the geometrical method, we shall conclude our study of Cartesianism with him. Were one to write an account of the total work of this remarkable thinker, one should have to include his political and theological writings. But for our purposes his *Improvement of the Understanding* and the *Ethics* will suffice.

In the former work, a fragment published posthumously, the author sketches an outline of method which illuminates for us the technique of the larger and completed work. The basic presupposition is that we can find the truth by the same kind of intuition, natural light, or insight—the name is unimportant—which all Cartesians had accepted. This form of knowledge comes into play whenever we assent to propositions, like some in mathematics, whose truth is indubitable. This is described by him as perceiving a thing solely through its essence. Thus when we assent to the truth of a geometrical theorem, the assent is different from the process of reasoning by which we reach the point of assenting to it. We may entertain an idea without assenting to its truth; it may seem probable; it may follow from certain premises; but until the moment comes when we see its truth as necessary and accept it, we cannot be said to possess certainty. The certainty is resident in the idea itself; the true idea is self-evident and by its very nature requires no other ideas to prove it. Such ideas are the indubitables of Descartes, and when they are known, they become the premises in which the rest of knowledge is implicit. But to reach such ideas, the mind requires a kind of purgative exercise. It must reject all ideas which come from hearsay, or from experience, or from deductions from premises which are not themselves intuitively perceived as true.

A second assumption of Spinoza's is the exact parallelism between every natural event and the idea of it. This assumption goes back to Aristotle and was general among philosophers until the role of thinking in life was reinterpreted in the nineteenth century. It was assumed by them all that logic is not only the art of correct thinking but also the pattern of the world of nature. The world is a logical world, completely intelligible, and the species and genera, the essences and accidents, and even the logical interrelations of propositions mirrored precisely natural things and events. Thus the identity of causality and logical necessity, the possibility of real rather than nominal definitions, the indifference of the spatio-temporal matrix to the nature of the things arranged within it were all accepted without question. It followed that if one started one's reasoning with absolutely true premises, the conclusions which would follow—assuming that no fallacies were committed—would not only be consistent with the premises but be accurate descriptions of nature. This amounted to maintaining that the particularity of things was a sort of blemish on the face of nature which the philosopher ought to remove. Things ought to be as logic declared them to be. That logic and ontology were not the same seems seldom to have been taken seriously, and even when philosophers were nominalistic, they tried to find some legitimate way of using the universals whose reality they denied. Everyone has always known that experience or nature or facts or things do not satisfy the requirements of logic. But two things must be noted at this point: first, there always were ways of explaining away the discrepancy by putting the blame on matter, or as we should say today, on errors of observation; and second, that the tolerance which scientists and philosophers show in their acceptance of deviations from the rule, accidents, exceptions, even monsters, varies greatly from man to man. But however puritanical an investigator may be in purging his results of such exceptions and deviations from the norm, he must always admit that his thoughts are always true only of an ideal situation: that which should occur under laboratory conditions. In the Cartesian school such errors and exceptions, that is, the margin between facts and theory, observation and deduction, were relegated to the realm of "mere appearance." They were not illusions in the sense that optical illusions, hallucinations, and normal perceptual errors were illusions, but they did not have the same status in the universe as that of the inhabitants of the mathematical or logical world. If the geometrical method acquired the prestige which it certainly had in the seventeenth century, it was attributable to its exquisite precision and the inevitable sequence of theorem from theorem. But also it could be applied with extraordinary success to those subject matters of most interest at the time—physics and astronomy.

The application of Spinoza's method to the reduction of fictions illustrates his confidence in pure logic. Any fiction or false hypothesis, he maintains, can be eliminated by discovering either the premises from which it must follow or the consequences which would follow from it. We can imagine fictitious monsters like chimeras, but once we have clearly defined what we mean by them, we perceive that their existence would be an impossibility. For their presumed existence would not be harmonious with the existence of other things which we know to exist. "After we have known the nature of body we cannot imagine an infinite fly; or, after we have known the nature of the soul, we cannot imagine it to be square, though we may express anything in words." That the soul as an immaterial being could not be square or of any other shape is true enough, but suppose that one had reason to believe, as Tertullian did, that the soul was material? Such a supposition would have struck Spinoza as absurd; like Descartes he was immediately aware of his soul as a thinking and therefore immaterial being. Moreover, nothing more than thinking was needed to define the soul, and any properties which were to be asserted of it must be implied strictly in the idea of thinking. But, as he says himself in a footnote, everything in nature is controlled by fixed and certain laws. One has only to know the law to deduce its consequences. And in general the consequences of a false idea or hypothesis will be such that they will be in contradiction with other ideas firmly known to be true.

Spinoza is fully aware of the tremendous number of the ideas which we habitually entertain and of their complexity. Hence he urges his readers, following Descartes, to analyze them until they reach simple ideas which will be clear and distinct. Then all confusion will disappear and we shall refuse to give assent to the compound, for it will show itself to be false. A simple idea is true by its intrinsic nature, not by its relation to objective fact. Truth must be understood as a character of the ideal world as a self-enclosed universe. Spinoza even goes so far as to say that if a man assert that Peter exists and does not know that Peter exists, even though he does exist, that assertion is not true for the man. Its "truth" would correspond, one supposes, to what Plato called true opinion. Truth when applied to simple ideas is self-revelatory; when applied to a set of ideas, it is their logical consistency. Falsity resides in asserting something of a thing "which is not contained in the conception we have formed of that thing," something which does not follow from the conception or which is inconsistent with it. This notion that conclusions are contained in premises is analogous to the Neo-Platonic notion that ideas flow from one single idea, are implicit in it, and by a kind of self-generation emerge out of it or flow from it. Plotinus' vision of the One at the apex of the cosmic hierarchy is probably behind this. As the One does not have to do anything to produce the rest of the universe, but the fullness of his being overflows and thus produces all things below him, so for Spinoza a true idea generates out of itself a set of other ideas which are logically posterior to it.[12] The truth then of the primitive ideas differs from that of a system of ideas, for the former is self-revelatory; the latter appears in the connections of the system.[13]

The main presuppositions of Spinoza are illustrated in his description of a true idea: it is simple or compounded of simple ideas; it shows how and why something is or has been made; and "its subjective effects in the soul correspond to the actual reality of its object." This description is held to accentuate the difference between the mind's own activity in understanding and its passivity in imagination. Our imaginations are the victims of external forces acting upon us; they provide us with visions which may or may not correspond to reality. Like language, the imagination cannot be followed as a guide to truth. We should not require simple ideas were they not the only source of indubitable knowledge. We should not ask why or how something is or has been made, if there were not a complete one-to-one correspondence between logical inference and causal relationships. And if the actual reality of the object of an idea did not correspond to "its subjective effects in the soul," there would be no possible passage from essence to existence. The effect is contained in its cause as a conclusion is contained in its premises, and Spinoza seems to believe in a literal equivalence ultimately between cause and effect. This, as Emile Meyerson was to show in our times, was a common assumption of all natural scientists. An explanation would consist in establishing a set of equations, and those features of the natural world which could not be inserted into the equations would be relegated to the realm of appearance or illusion or subjectivity or the imagination or some other realm or level or stratum of lesser reality. The philosopher could presumably leave this lesser world to poets and politicians.

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[12] For the relation between Spinoza and Neo-Platonism, see A. O. Lovejoy, *The Great Chain of Being* (Cambridge: Harvard University Press, 1936), pp. 151 ff.; and the same author, "The Dialectic of Bruno and Spinoza," *University of California Publications in Philosophy,* Vol. I (Berkeley, Calif.: University of California Press), 141 ff.

[13] There is a curious remark made in passing by Spinoza to the effect that if a man had only one idea in mind, whether that idea were true or false, there would be neither doubt nor certainty present, "only a certain sensation." Doubt arises "through another idea" which is obscure and indistinct. Yet the example which he gives is that of a rustic who will believe the sun to be of the size it appears to have because he does not know that the senses sometimes deceive us. Here it would look as if the rustic's lack of doubt arose from the presence of a single sensory perception or set of changing sensory perceptions. He will, one might maintain, conclude that the sun changes its size. But Spinoza would probably refer one back to the man who says that Peter exists, when Peter actually does exist, and yet he does not know whether he exists or not.

That is why the understanding perceives things under the aspect of eternity. Our problem now is to see what use Spinoza made of his method when writing his *Ethics.*

It is perhaps unnecessary to point out that Spinoza's *Ethics* is expounded as if it were a geometrical system with all the apparatus of definitions, axioms, theorems, corollaries that appear in Euclid. In this he was following the proposals of Descartes which had been followed before Spinoza's time by Cordemoy and Geulincx. It was a method of exposition which also is found in Newton's *Principia.* The definitions which are given by Spinoza are not believed by him to be simply nominal; they are real definitions, and he justifies their applicability to the world of existent things by his assumption that there is at least one essence which implies existence. If one grasps the eight definitions which open his book, one has in germ almost the whole of his philosophy. I do not say that every theorem in his work follows merely from these definitions, for that would be absurd. But I do mean that they contain in themselves a total metaphysics upon which the ethics rests as on a foundation.

For instance, he first defines the self-caused as that whose essence "involves existence," and explains this as meaning "that whose nature cannot be conceived except as existing." This does not mean that we are to determine by the limitations of our individual conceptual powers the being whose essence involves existence; it means on the contrary that there are beings whose essence involves existence and that when one comes to conceive of them, one is impelled by the force of logic to conceive of them as existing. Self-causation follows since there need be nothing else to cause such beings to exist. If their essence need not involve existence, then they might or might not exist and whether they did or not would depend on the operations of an outside cause. In other words, the requirements of logic alone suffice to determine the meaning of this term; since self-causation is a logical possibility, a real possibility to be considered is that there be at least one self-caused being. The same is true when Spinoza comes to his definition of substance as "that which is in itself and is conceived through itself; that is to say, that whose concept does not require the concept of anything else by which it must be formed." But here there are certain presuppositions which are not clarified by Spinoza: he demands as a matter of course that everything be composed of substance and attributes which may exist in several modes. The attributes are named by certain adjectives—red, blue, extended, thinking, round, square, and the like. They must be attributed to a subject or substance which possesses them, that which is named in the subject of a declarative sentence. The attributes constitute the essence of the substance: if no swan is four-legged, then quadrupedality is not part of the essence of swanhood. But if all swans are bipeds, then bipedality must be thought of as part of their essence. This analysis of things into substance and attribute is, as everyone knows, at least as old as Aristotle; it agrees with linguistic usage and sounds simply like common sense. Again, by "God" Spinoza means "a being absolutely infinite, that is, a substance having infinite attributes, of which each expresses an eternal and infinite essence." Such a being's attributes involve no negation, whereas when we attribute something to an ordinary substance, the attribution does involve negation in the sense that each attribute is in principle the negation of all contrary attributes. If we say that a swan must have two legs, then we deny the possibility of its having more or less than two legs. Whereas when we speak of God, we speak of a being whose attributes do not involve such negation.[14] Should one ask how God came into the discussion, it should be noted that since some things are not infinite in their attributes, there must, it is thought, be also something which is infinite in its attributes. That is, the logical possibilities become logical necessities in this mode of thinking.

The axioms, which are seven in number, are supposed to be those clear and distinct ideas whose truth cannot be doubted. Thus, "All things which are, are either in themselves or in something else." Here a question might arise about the meaning of "in." To be *in se* means to exist independently of all other things, and consequently if there is anything which is in itself, it must be conceivable in its own terms, be self-caused and, in fact, absolutely infinite. But Spinoza immediately adds a second axiom to the effect that whatever cannot be conceived through anything else, must be conceived through itself. He might have entertained the possibility of there being some inconceivable beings. Two axioms about causality are then set down: (1) that from a given determinate cause, an effect necessarily follows and contrariwise, if no determinate cause is given, it is impossible that an effect follow; and (2) that the knowledge of an effect depends upon our knowledge of its cause and involves this. Just what the first axiom means is none too clear, for one might gather that Spinoza was asserting as self-evident the statement that every cause necessarily produces its natural effects, whereas he must have known that accidents occur which prevent some causes from being effectual, as when a falling body is swerved from its path by the interference of some outside force or when a medicine fails to take effect. But such a criticism would not be fair since he is thinking of scientific and other laws as logical and not historical propositions. This appears in his alternative statement of the axiom, according to which he points out that no effect could follow from an undetermined cause. We may not know what the cause of an effect is, but there is always a definite and determinable cause for every effect. The fourth axiom, which states that the knowledge of an effect not only depends upon a knowledge of its cause but also involves it, might well be questioned by those who would point out that the effect might be due to several different causes and that to argue back from an effect to its cause would commit the fallacy of asserting the consequent to prove the antecedent of a hypothetical syllogism.[15] But Spinoza's idea of a cause comes out clearly in his fifth axiom, according to which things which have nothing in common cannot be understood in terms of each other, an idea which involves the principle of *ex nihilo nihil.* It is the fundamental reason why he believes that there can be no causality between mind and body.

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[14] I am not pointing to anything novel by indicating that Spinoza is here utilizing the ancient principle, "All determination is negation."

From combinations of these definitions and axioms it follows that there is only one substance in the universe, not two as Descartes and Malebranche had maintained. For if there were more than one, they would have to be totally unrelated, have nothing in common, could not be understood in common terms, and, what would be worse, would each be absolutely infinite. They would be indistinguishable from each other and hence, to all intents and purposes, one. Spinoza does not lay down explicitly the axiom of the "identity of indiscernibles," but he uses it nevertheless (Prop. V). This one substance is God. God necessarily exists because there is nothing which could prevent His existence, since there is not more than one substance. If then there is only one substance, God, mind and body must be His attributes and not separate substances. This, Spinoza is careful to say, does not imply that God "is like a man, composed of a body and a mind, and capable of passions." Body for Spinoza is, as for Descartes, simply extension, and extension is neither limited, finite, nor to be thought of as measurable. It is rather infinite and eternal space, and space for Spinoza is that of which geometry is true. It is the subject matter of a set of purely logical theorems; it is not to be thought of as that which is weighed and divided into parts. Similarly with mind; mind is not the human mind but those ideas which follow logically from a few clear and distinct ideas, drawn out in time by us but existing eternally and hence contemporaneously in God. God thus becomes the one free and active cause in the universe, as He was for different reasons in Malebranche, and He acts as an immanent not as a transcendant cause. Things occur as they do because of God's nature not because He interferes with the course of events to bring about this or that. If they follow from God's nature as their immanent cause, then we ought to be able to deduce logically all of science, whether physical or psychical or anything else.

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[15] In other words, "If p, then q," permits us to deduce q from p, but not to deduce p from q. This is in accordance with traditional logic. Readers who have not studied elementary logic can find the matter discussed in any elementary textbook in logic, e.g., Jevons, *Elementary Lessons in Logic,* Lesson XIX (New York: Macmillan Co., 1913).

There can be no limit to the attributes of the one substance, since He is infinite. Mind and matter are therefore simply the two attributes which we know about. But what could possibly limit His attributes in view of the fact that He alone is a true substance? According to the method in use here, unless some reason could be discovered for limiting His attributes, no limitation should be admitted. The infinity of God's perfections was for similar, though not identical, reasons asserted by many of the medieval philosophers. Definiteness or the possession of a finite number of properties could only exist because of something outside the subject so characterized. A material object is limited in size by the space which surrounds it or by other objects whose frontiers are in contact with it, as the walls of a container restraining the spread of a liquid or gas. But no such being could be found to limit the attributes of God. These attributes had always been thought of as "perfections." If God is to be thought of as perfect, then there must be nothing this side of Him to delimit His perfections. For the limiting agent would presumably be superior to God. A similar situation is found in the fragments which are left of the poem of Parmenides. There it is stated that all one can say of Being is that *It is.* It cannot be thought of as being this, that, or the other, for in that case its being would not be all-inclusive. Therefore in order to avoid the error of attributing special properties to all Being, one says no more about it than the mention of its name. Spinoza can make no use of the other attributes of God in his system, nor does he pretend to know what they are. But that they are, he does know, for he has no reason to believe that mind and body are the only two attributes possessed by God.

That mind and body are parallel, to use the customary term for their relationship, follows necessarily from his conception of causality that there can be no interaction between the various attributes. For the only way to conceive of interaction would be on the basis of a community of properties, and there is none such. One can conceive of thoughts determining other thoughts and physical events determining other physical events, but there can be no physical cause of a mental event nor any mental cause of a physical event. This is asserted regardless of the apparent fact that in volition the mind moves the body and in sensation the body moves the mind. If both body and mind are attributes of God and if in God's nature everything proceeds necessarily, it is bound to be a matter of indifference whether we shall describe an event in mental or physical terms. For there is an idea corresponding to every event whatsoever, and since matter is extension and extension is conceived through that set of ideas which is geometry, it is of no moment whether we think of events as material or mental. But here one is confronted by the apparent fact of a conflict between God's being, necessary and eternal, manifested to us in logic and geometry, and man's being, contingent and temporal, manifested in the play of passions upon thought, birth, and death. How do we interpret our actual existence on the historical plane? This cannot be deduced from the order of necessity, for Spinoza admits in an axiom that "Man's essence does not involve necessary existence, that is, from the order of Nature, it can happen that this or that man either does or does not exist." Moreover, the fact that man thinks must also be stated as an axiom, for there is no logical reason why he should or should not think once given his existence. The discrepancy between the two worlds, the order of ideas and the order of things, will not appear in God's being, but it emerges with striking clarity in man's being. One of Spinoza's principal problems is to remove this discrepancy. He tries to do it by means of an intellectualistic axiom to the effect that in love, desire, or any of the other passions, there must always be present to the mind an idea of that which is loved or desired, though the idea may exist without the passion. This may or may not be true as a statement of fact; but what is of interest is that he has to assume it. Strictly speaking there ought not to be any world of things, nor does he ever give us any account of why one exists. But he cannot deny its existence and hence grants it.

We emerge out of the contingent and temporal world through thought. As part of God's nature no thing is purely contingent. In God's mind everything is logically necessary, and if we could make our minds coincidental with His, we should presumably know why and how everything comes to pass. We do make our minds coincidental with His when we have clear and distinct ideas and argue rationally from them. But why, if "the human mind is part of the infinite intellect of God," does it ever err? Error for Malebranche came from sin, but then Malebranche believed in the existence of two substances in man imperfectly associated. For Spinoza there was no real contingency, no chance event. Everything was necessary and part of the eternal and divine nature. The building of the road between the two worlds was patiently undertaken and built up stone by stone. First, he argued that the object of the idea constituting the human mind was the body, a mode of extension, and nothing else. Then he argues to the complexity of the human body which is made up of a variety of parts acting each in peculiar ways. Third, the idea of which the human body is the object must therefore also be complex. Fourth, our only knowledge of our bodies comes to us through the ideas we entertain of the "modifications" by which they suffer. But such ideas are not necessarily adequate. They usually are confused. The confusion exists only in our minds, not in God's, but if our minds are parts of God's mind, we should like to know how the confusion arises. To this desire Spinoza gives little satisfaction. He does maintain that confused ideas arise from necessity, as do clear ideas. But one suspects that it is just his common sense intervening here which makes him admit the inadequacy of some of our ideas, without justifying their existence.

He knows from logic that adequate ideas must be general ideas, not perceptions of individuals. He also knows that all minds and all bodies have some traits in common, which makes it possible for general ideas about mankind to arise and have some ground. It follows from this that insofar as we are like our fellows in mind and body, to that extent we may have adequate ideas about ourselves. Consequently it is essential that he establish both the common features of mankind and those which differentiate individual from individual. The former are obviously the most general ideas, those which are indubitable and which, he was going to say, are known by intuition. The latter, due to prejudice or to the varying experiences of people, he does not discuss, having decided, as he says (II, Prop. XL, note 1), to leave the matter for another treatise. But lest one think that we form our general ideas by a process of abstraction from particulars, Spinoza takes the trouble to point out that when this is done, general ideas vary according to the experiences from which they are abstracted. "They," he says, "who have been more often given to contemplating with admiration man's stature, by the name of man will understand an animal of erect stature; they, however, who have been used to contemplate some other trait, will form another common image of man, for instance, man as an animal who laughs, a featherless biped, a rational animal, and so on and so forth, each man will form universal images of things according to the disposition of his body." In this way the real essence of man will never be reached and the empirical mode of forming abstractions will always fall short of adequacy. What is wanted is that general idea which is not only true of an individual's experience but also follows from ideas in the mind of God, and thus are true to Nature as a rational system of ideas. Spinoza's epistemology, it thus appears, has to account for our knowledge of such ideas, and to do this he introduces the notion of intuitive knowledge which is different both from perception, imagination, opinion, and from the implications of our common notions. Intuition grasps adequate ideas of God's essence and proceeds to an adequate knowledge of the essence of things. Intuition and rational knowledge cannot be false; only knowledge of the first sort can err.

Actually this is the distinction which had long puzzled philosophers between our knowledge of self-evident assertions or ideas, to use Spinoza's term, assertions which cannot be doubted, and those which may or may not be true. The human being exists in a cognitive situation in which he is presented with ideas of whose certainty he is in doubt; ideas which arise from moment to moment in the course of his temporal life. But he wants and must have ideas which are not merely true at such and such a time and of such and such a place. He needs such ideas both as a standard by means of which he may correct his empirical ideas and as premises from which he can deduce ideas in which he may have confidence. That we correct our empirical ideas by rules, by accepted truths, by what we believe to be self-evident propositions is obvious. Spinoza's problem was to give such standards of truth and rules for deduction and inference a status in his universe. Transmuting universal and eternal laws of science into ideas in the mind of God was not too difficult. For a scientific law is not a natural fact; it is a symbol of something which presumably transcends time and place. It is a symbol which has meaning beyond the limits of anyone's individual experience and yet is applied to experience as a corrective device. If it were simply a generalization from the experience even of several thousands of men, it would still not be universal or eternal. Moreover, it is to be distinguished from its subject matter. Since Spinoza with his belief in the complete intelligibility of the universe thinks that all such laws can be organized by what he called the geometrical method, their organization is identical with the mind of God.

The human mind is still left divided between true and false knowledge, between true and possibly erroneous ideas, between experience and rationality, between the realm of time and the realm of eternity. But though no man may be able to formulate the laws which govern the world of space and time, such laws must exist; otherwise there would be no ground for asserting the existence of a system of general ideas. But if everything whatsoever is describable in terms of general law, then there can be no such thing as chance in the universe, no free will. Since freedom was asserted only of the will, not of the understanding or reason, Spinoza finds the easiest course toward the proof of complete determinism in the identification of the will and the reason. This identification proceeds by pointing out that one cannot will something which is completely undefined. One wills something which is identifiable, which is a specimen of something or other, which is a possible object of knowledge. (Otherwise one would not know what one wanted nor whether one had or had not attained it.) Consequently the will is simply the affirmation of an idea, exemplified in the case of assenting to truth. This is the very polar opposite of conceptions of the will which were to arise in the early nineteenth century when the vagueness of our ideas and the striving after fulfilling them, even though their meaning was unknown, became something not only predominant in human life but also something noble. Spinoza is faithful to the classical tradition which maintained that the intellect had primacy over the will, and that one first had an idea, then accepted it as, let us say, a plan of action, and then strove to carry it out. If then the will and the intellect fuse, the determinants of action are ideas, and just as one idea implies another, so one affirmation of an idea causes another. When we have the illusion of free will, it is because we have not clarified the ideas which are our program, do not know what is involved in them, are, in short, the prey of confusion.

At the risk of redundancy, let us repeat Spinoza's warning that ideas are not to be confused with images. They are not what have been called percepts, sense data, sensory qualities, pictorial copies of objects either in the external or internal world. They are, as has been said above, something of which it can be said that they are true or false. They are what are symbolized by declarative sentences. Spinoza is insistent on this point, and indeed, if it is not grasped, the whole Spinozistic philosophy becomes unintelligible. Thinking does not imply extension, and consequently, if an idea is a mode of thinking, it can neither consist in images of bodies nor in words. Hence our purely mental life runs along on its own level, and its course is laid out by logic alone. Our purely bodily life runs on its level and thereon is no thought whatsoever. Causal determinism is found on the bodily level and corresponds step by step with logical determinism. A man is still a dual being, as in Descartes, but there is no point at which the two aspects of his nature join.

As we have seen in Charron, in Descartes, and in Malebranche, as well as in the lesser writers of the seventeenth century, the main ethical problem was the mastery of the emotions or passions. Their answers to the problem varied to be sure, but the problem appeared in them all. Spinoza is no exception to this rule, and hence he feels it incumbent on him to prepare the way for an answer by first stating the origin and nature of the passions, then by explaining how they gain control of us and make us slaves, and finally how we may free ourselves of their mastery over us. He refuses to take the initial step of making man a sort of unnatural animal, a blemish on the uniformity of law. "Nothing is done in Nature," he asserts, "which can be attributed to some flaw in her. For Nature is ever the same and her character *(virtus)* and power of acting are everywhere identical. That is, Nature's laws and rules, according to which all things are done, and are changed from one form to another, are everywhere and always the same, and therefore one and the same must be the explanation of the nature of whatsoever things there be, to wit, through the universal laws and rules of Nature." Our passions must then follow from the same laws as everything else, must be understood by the same principles, and presumably when they are understood, we shall have done enough. "Consequently I shall consider human acts and desires exactly as if it were a question of lines, planes, and solids."

Since it was believed that human nature could be divided into that part which is active and that which is passive, Spinoza defines actions as that part of our behavior which can be clearly and distinctly understood as following from our nature. This again is obviously a purely logical procedure. Passions, on the other hand, will be that part of our behavior of which we are only a partial cause. An emotion *(affectus)* is then defined as a modification of the body "by which its power of action is increased or diminished, aided or coerced, and at the same time the ideas of these emotions." If any of these emotions can be attributed to us, then the emotion is called an action; if not, a passion. But it should be remembered that the attribution is determined by the single test of whether it can be deduced from our nature. Hence, insofar as we are minds, "we" means a thinking being and the emotion must be deducible from "thinking." The mind then is active when it has adequate ideas, passive when it entertains inadequate ones. Since no bodily state can determine the mind to think and since the mind cannot determine the body to move or remain at rest, we cannot explain the bodily feelings as arising from our minds. And since everything tends to maintain its own being, an ancient medieval doctrine, no idea will tend to self-annihilation. But similarly the body will not annihilate itself and our ideas of our body will tend toward its perpetuation. This gives Spinoza definitions of the two primary emotions, love and hate; the former being pleasure accompanied by the idea of an external cause, the latter pain accompanied by a similar idea. Every emotion, as in Charron and general tradition, will be defined as including some idea, and will be classified either as pleasure or pain. The specific name given to the emotion will be determined by the circumstances under which it is experienced. Thus hope is an inconstant pleasure arising from the image of something future or past of which we do not yet know the issue; fear an inconstant pain arising in the same manner. When the issue is clear, hope becomes confidence *(securitas),* fear becomes despair. We shall always strive to affirm everything which may affect us pleasurably and to deny what will affect us painfully.

After defining the various emotions in this manner, Spinoza points out that pleasure arises as our minds regard themselves and their own power of action, and that the pleasure increases with the distinctness with which they conceive these things. Such pleasure is found whenever we understand that we are the cause of what we do or feel, and examples of such pleasures are courage, highmindedness, and fortitude. In each of these examples a man desires to act in accordance with reason, and no other justification is needed for calling them active. The result of this is that passions become confused ideas, and just as our passivity varies directly with confusion, so our activity varies directly with clarity. The introduction of this element of degree should not be taken as an admission that the body and the mind are not so separate as had been supposed. Passions are still ideas, however much they may seem to have organic sources. It is their adequacy which varies, their clarity, and therefore their certainty. The pleasure and the pain which we feel vary in the same way, and Spinoza not only defines pleasure and pain in terms of the adequacy of the ideas associated with them, but believes that men actually do feel pleasure when their ideas are more, rather than less, adequate. Thus pleasure, utility, and truth are all fused into one being, the human mind as integrated into the mind of God. And the one goal worth seeking is that integration. Human servitude is servitude to the emotions to be sure, but only to the painful emotions. When we attain possession of completely adequate ideas, we shall not presumably be in a state of utter apathy, however similar to Stoicism Spinoza's ethics seem to be. On the contrary, this is the greatest delight. For it is identical with understanding as God understands. But since God is not a person in the popular sense of that word, His understanding is precisely the system of all true propositions, linked together by logical necessity. When we reach that state we reject all notions of good and evil, for good and evil do not pertain to Nature but to our desires. When we grasp the necessity of that which happens, whether to us or to the world in general, we assent to it, accept it as necessary, and are happier in our knowledge than we would be in ignorance. We shall, says Spinoza, bear with equanimity whatever befalls us, "for we are part of all Nature whose order we follow. If we understand this clearly and distinctly, that part of us which is defined by intelligence, that is, the better part of us, will flatly acquiesce in this, and will strive to persevere in such acquiescence." For if we are really intelligent, we shall not strive for that which is uncertain, or contingent, or merely possible; rather shall we strive to live in harmony with the necessary laws of God or Nature.

That is what is meant by human freedom. The rational man is freer, he says, in a state in which he lives under a general system of law, than in solitary independence. His freedom lies in his reason. He knows why the laws are as they are and knows why it is better to have a general system of law than anarchy. He is free from the bonds of hatred, anger, envy, indignation, contempt, and pride. And hence he is free for the unhampered activity of his understanding. That is the only kind of freedom which Spinoza wants and thinks worth wanting. He rises to his point of highest eloquence in describing it. When we are free, that is, motivated only by reason, we see things "under the aspect of eternity"; we are enjoying "the intellectual love of God." "The wise man, insofar as he may be considered such, is hardly moved in his mind, but conscious of a certain eternal necessity in himself and in God and in things, never ceases to be, but always maintains a true acquiescence of mind." That acquiescence is the rational acceptance of the necessary. It is the only end of man.

If this system of ethics seems strange to the modern reader, educated as he is likely to be in anti-intellectualistic programs, it should be borne in mind that Spinoza never once makes mention of the self, the subject, the ego, as a separate and individualized thing. The only antecedent for the pronouns, *I* and *we,* as far as they refer to our minds, is the eternal system of laws which he calls the mind of God. Just as he depicts the man living in a lawfully governed state as freer than the solitary man, though one might think his individuality would be subject to more restraints than that of the hermit, so he depicts the Sage as thinking in complete harmony, indeed identity, with the eternal thoughts of God. If Malebranche thought it right and proper to call this man *ce misérable Spinoza,* it was because he realized clearly that regardless of the words used by Spinoza, there was no God but Nature, no self but reason. Yet by ironing out the wrinkles in the Cartesian system, Spinoza was forced to remove the idea of personality. There was a strain both of humility toward his own person and of arrogance toward irrationality which distinguished his philosophy from that of most of his contemporaries. It was no doubt wrong of him to equate God and Nature, but his problem was to give some meaning to a term which seemed to him to have been previously defined only in untenable ways. It is also probable that his admiration for the orderliness of the physical world, as interpreted through mathematics, was religious. He had a good precedent in the works of the ancient Stoics, but at the same time he could not be said to have elaborated a philosophy harmonious with the fundamental dogmas of either Judaism or Christianity.

CHAPTER 5

Anti-Cartesianism in France

IN SPITE of the great prestige of Cartesianism in France and of the cogency of its arguments, there were from an early date vigorous opponents of both the method and its conclusions. The opposition did not come merely from traditionalists in philosophy, latter-day Scholastics, and from sceptics, but also from men interested in breaking loose from tradition and in innovating a philosophy of their own. Moreover, though Descartes had protested his loyalty to the teachings of the Church, there were certain conclusions of his method which seemed contrary to those teachings, and it was not until the eighteenth century that his *Discourse on Method* and even the *Meditations* were admitted into ecclesiastical schoolrooms.[1] Possibly for this reason, though reasons are hard to assign in such matters, certain devoutly religious writers, like Pascal and Huet, also opposed the Cartesian philosophy.

1. GASSENDI

The earliest of the Anti-Cartesians whom we shall discuss is Gassendi (1592–1655). Gassendi was a determined opponent of what he believed to be Aristotelianism, a disciple of Epicurus, and a priest. The combination was somewhat peculiar and for that, if for no other reason, might attract attention to him. His objections to Descartes arose primarily, one suspects, from his general antirationalism. This appears clearly in his arguments against the Aristotelians, which first appeared in 1624.[2] Like so much of Gassendi's writings, the *Exercitationes* lists pretty nearly every argument which its author can either think up for himself or find in other men's works bearing upon his subject, and though much of what he has to say seems superficial and sometimes beside the point, his books are of inestimable value to the historian who is interested in the general state of opinion. Thus we should probably not feel that because Aristotle was neither a Jew nor a Christian, his ideas were of any less importance philosophically. But Gassendi (Bk. I, iii) feels that not enough attention has been paid to the fact that he was a pagan. He could not be said to have written under the inspiration of a divinity, but by the orders of an oracle. But oracles were conducted by demons, and what would be the greater profit of a demon, or *the* Demon, than to propagate the philosophy of a pagan and insinuate it into the minds of Christians? Had not Lactantius said, "Aristotle neither worshipped God nor even took thought of Him"? In fact, he believed the world to be eternal, not created, and probably thought the soul to be mortal. It is perhaps odd for a man who was to revive the philosophy of another pagan, Epicurus, to be so squeamish about Aristotle. But on the other hand, it was quite to the point to emphasize those elements in Aristotelianism which could not be reconciled with Christianity. For it had been the custom to select from the corpus those details which could be given a Christian dress and to omit the rest, a procedure which was also used in the reading of Plato.

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[1] As late as the edition of the *Index Librorum Prohibitorum,* published under the orders of Benedict XIV in 1758, the entire works were listed *donec corrigantur* as had been decreed in 1663, and *Meditationes de prima Philosophia,* which had been printed in Amsterdam in 1709, was listed under a decree of 1722 with no mention of possible correction.

But Gassendi's objections to Aristotelianism are not all so thin. His objection to the syllogism is, though in no way original, one which was to be repeated well into the nineteenth century. It is the objection that a syllogism is always a begging of the question. By the admission of all, there is nothing in the conclusion which was not previously in the premises. If we conclude from the premises (1) "All men are mortal" and (2) "Socrates is a man," that "therefore Socrates is mortal," we must have already known that he was mortal when we framed the major premise, for we should have had to include Socrates in our survey of all men.[3] Whether this objection is fatal or not, and it probably is not, it was one in which Gassendi had great confidence, and in view of the strong opposition to Aristotelianism as filtered through the Scholastics, which was manifested by others in the seventeenth century, it is at least worth recording here.

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[2] All quotations and references are to the edition of Lyons, 1658, in six volumes.

[3] For a discussion of the syllogism as a *petitio principii,* see W. D. Ross's edition of Aristotle's *Prior and Posterior Analytics* (New York: Oxford University Press, 1949), pp. 38 ff.

More basic than his objections to the syllogism is his theory that organized science is always misleading (*ibid.*, II, ch. vi). Science can, in the last resort, deal only with appearances, not with the inner and necessary causes. The retention of the distinction between the sensory appearances of things and their inner natures gave him room for God, the mysteries of religion, and possibly miracles. Man wishes to know things which are beyond the reach of science, things which are open only to faith. We can argue about rational matters, but the things of faith are accepted without question. Science is a sort of empirical knowledge; such as, that I am sitting rather than standing, that it is now daytime rather than nighttime, that honey is sweet and not bitter, that fire is hot and not cold. But if one ask whether honey is sweet in its own nature and not simply sweet to the human tongue, then science has and can have no answer. Here we can say that we have no knowledge, that we are totally ignorant of anything "according to its own nature and how it is through its inner, necessary, and infallible causes." Such knowledge as we have comes from the senses or is of the present sensory moment. But unfortunately the senses do not always tell the same story. Sensory knowledge varies from animal to animal, from man to man, and within the experience of a single man. Are we to institute a court of judges who will declare what the universal truth is? That truth must be universal, Gassendi never doubts. That one could set up systems of relation in which certain statements would be true which would not be true outside of the system may have occurred to him but, if it did, he found it unsatisfactory. For the variation within individual experiences concerning sensory data is enough to prove to him that sensory statements are misleading. It should be clear that if one is careful enough of the way in which one expresses one's sensory experiences, one will not inevitably be wrong. Thus if for some reason or other a man pronounces honey to be bitter—and there may be men who find it bitter—then they are not in error when they say that they find it bitter. The trouble clearly arises when they leave out that part of the statement which says, *"I find it* so and so," and substitute for it, *"It is* so and so," meaning presumably that all men will find it so. But that was precisely what Gassendi and most people of his time desired. The result of this will appear later in this book.

Moreover the assumption of a distinction between inner and outer natures was one which was to prove embarrassing to later thinkers. These *causae intimae* had to be unknowable for the very reason that if they were observable, they would fall under the suspicion that all observation fell under. If all knowledge comes from sensation, then one might have been asked why non-sensory statements should ever be made. The distinction between what a thing seems to be and what it is is an old and useful one. But when a thing is what it can never be observed to be under any circumstances whatsoever, or when it is what can never be inferred from anything observable, then the distinction does more harm than good. For the inner natures can be anything whatsoever; there is no way of verifying anything that may be said about them. In our own days such statements have been called meaningless. It would be wiser to maintain that they are simply unverifiable, for if they were meaningless, one would never know whether they could be verified or not. Moreover, one cannot tell whether a sentence is nonsense or not unless one knows what it is supposed to mean, what its framer thinks he means, what he intends by it. What justification was there then for Gassendi, since we are dealing with him, to make the distinction?

In the main the reason was the necessity for finding some basis for universally true statements. If any sentence is to be universally true, it would seem to be true *of* something and consequently that something must have exactly the nature which it is described as having in the sentence in question. Therefore one must find an object—or set of objects—which does have a single and unchanging character. Such objects do not exist on the plane of sensation, for the reasons already stated; namely, that sensory experience varies from individual to individual and from species to species and within the life of a single individual. But if all knowledge is either sensory or derived from sensation, then one must either conclude that there is no such object and that the world is a flux of sensations; or, that if there is, then it is unknowable. Galileo's technique was to make a distinction between those sensory qualities which varied with the observer and those which presumably did not. The latter constituted the world of physics. Descartes made a similar distinction. But Descartes' method was not to base all knowledge on sensation, as we have seen, but on certain irrefragable truths whose evidence was the impossibility of denying them without reasserting them. Gassendi wished to retain the traditional empirical method and yet have inner natures too.

He is convinced that there are inner natures, and he is also convinced that men can never know them. Knowledge of them pertains to the angelic, or rather to the divine, nature than to human. "Our intellect knows about or knows *(scit cognoscitve)* many appearances by experience" (*ed. cit.,* II, ch. vi, 7). From such appearances only other appearances may be inferred. But one cannot by inference move from the sphere of appearance to that of inner natures, which by definition do not appear. Gassendi could have concluded that since we can have no knowledge of inner natures, we had best stop talking about them. And in a letter written later to Lord Herbert of Cherbury he points out that appearances are good enough for all practical purposes (*ed. cit.,* III, ch. iv, 413). If, however, we wish to go beyond the sensory appearances of things, to inquire into the nature of substances and principles, of formal and eminent causes, we shall never discover the answer. But we need not blame God or Nature for this; we should blame only our own idle curiosity. The fact that we cannot answer these questions is proof that God wanted the answer kept for Himself and has granted us whatever bits of information are needed for our guidance through Revelation. And the field of revealed knowledge is accessible to us only through faith.

Just as Gassendi attacked the remnants of Scholasticism, he attacked Descartes. So firmly convinced an anti-rationalist was bound to object to any philosophy guided by the principles of mathematical reasoning. Though his objections to Descartes include almost everything that philosopher espoused, we must limit ourselves here to a few of his objections.

The most important of these is directed against the central Cartesian principle of the indubitability of self-knowledge. The natural light would suffice, he maintains, to prove one's self-existence; one need not have recourse to what is involved in thinking. Any act which we perform involves an agent, and that agent is ourselves. Why then all this extraordinary apparatus of doubting what we need not doubt? Descartes' reply is that all such acts occur as much in dreams as in waking life and hence, for metaphysical purposes, will not lead us to certainty. Whereas wherever thinking occurs, a subject of thinking is found. If one says, "I walk, therefore I am," the certainty of self-existence arises in the consciousness of walking, not in the act of walking. Descartes' reply would seem conclusive, given his definition of thinking, and, since one could walk and presumably perform most of the acts mentioned by Gassendi without being conscious of them, they in themselves would not produce the certainty required. But Gassendi, though weak in this objection, is stronger in his rejoinder when he points out that behind all this search for unity is the acceptance of the logical processes of inference as leading from true premise to true conclusion. The geometrical method was indeed accepted by Descartes without question as the soundest method and, though it may have been in fact the soundest, it was not self-evidently so. On the other hand Gassendi was wrong when he maintained that it was employed in deducing self-existence from thinking. "I think, therefore I am" was not held by Descartes to be a syllogism or any other form of inference. It was stated in inferential form, to be sure, but to Descartes, as appeared in his correspondence, the form of verbal expression was misleading. One knows oneself immediately in the act of thinking and that act is unique in this respect. Hence Gassendi's elaborate proof that the *cogito* was an incorrect syllogism was beside the point, however sound he may have been in his charge that Descartes had no absolutely certain proof of the value of the geometrical method.

As for the complete separation of the mind and the body, based on the clear and distinct idea of the soul in which there is no evidence of a corporeal nature, Gassendi maintains that his opponent had not considered his entire being, but only a sort of internal "somewhat more occult part," which he chose to call his soul. Could he not just as well have thought of his soul as a sort of sublimated spirit which has bodily and spatial existence? Was he bound to conceive it as immaterial? Does the concept of thinking entail immateriality? Descartes' answer to this will be judged differently by different critics. If one read Descartes as maintaining that since thinking does not in itself entail extension, one can conclude that its agent is inextended, thus agreeing that Gassendi's arrow falls far short of the target. But if one read Gassendi as maintaining that there is no more reason to assert inextension of the soul than there is to assert extension, the objection seems more telling. For if one should argue, for example, that one's evidence concerning some argument or other does not permit one to conclude that a certain statement is true or false, one must not conclude that its contradictory is true. Thus if one is arguing to a man's guilt and finds that he could not have been present when the crime of which he is charged took place, one has no evidence of where he actually was at the time of the crime. One has simply evidence of where he was not. Descartes to this could have replied that only two possibilities existed: immateriality and materiality. If then there is no reason to believe that a thing is material, one must conclude that it is immaterial. But again, where did Descartes get the premise that matter and mind sum up all possible kinds of being? Descartes did not bring this up and, it must be confessed, treated the whole matter somewhat cavalierly. Yet when one is building a new method, one might be expected to examine it for all its possible weaknesses. And, if one wishes to interpret his adversary in as sympathetic a manner as possible, one must admit that more was taken for granted by Descartes in this case then he was willing to confess. It is true that at the time no one would have felt the force of this objection very deeply, for the custom of dividing all existence into the material and the incorporeal was firmly established. The question was, however, one of technique, not of fact, and the technique was supposed to produce unquestionable conclusions, unquestionable because indubitable by the very nature of the method.

Another of Gassendi's objections to Cartesianism concerns the souls of the beasts. Descartes had identified thinking with doubting, understanding, affirming, denying, wishing, imagining, and feeling. But how could he deny that the beasts imagined and felt? They have organs similar to ours and therefore one might well argue that these organs serve the same purpose as ours. Moreover, though Descartes maintained that beasts do not choose and exercise volition, nevertheless he merely asserted this, since their behavior would show the same characteristics as ours does when we choose and make decisions. But here Gassendi did not understand that Descartes' method did not permit him to grant anything which did not follow logically from his clear and distinct premises. The rules of the game would not allow him to make observations of the type which Gassendi demanded. Gassendi's objection was consequently really directed to the method itself rather than to its conclusions. And herein he could defend himself well enough. The idea of thinking might imply that of sensing, but it does not imply that of having sense organs. They are observed to exist but only as extended matter. Gassendi might at this point have said that so do other people, and the only evidence which we have of their minds is what is conveyed to us by their bodily actions, including speech.

There is no need to take up each of Gassendi's objections in detail in a work of the size of this one, for what we are describing is his general difference from his adversary. Briefly it can be said either that Gassendi did not understand the nature of Descartes' method or that he himself refused to use it. And in fact, when we turn to his own philosophy, we see that he is less avid of absolute certainty than Descartes and also more given to observation. The opening words of his best known work, the *Philosophiae epicuri syntagma (Outline of Epicureanism),* makes it clear that in his eyes the aim of philosophy is to prepare one for a happy life. Since happiness consists in tranquillity and lack of bodily pain, philosophy is a kind of psychotherapy. This was quite in keeping with the Epicurean tradition and, as far as appearances went, quite out of keeping with the Christian tradition. For Gassendi says nothing about the philosopher's task including that of preparing man for his celestial life, or for that matter of preventing his descending to an infernal one. The major theme of his work is the elimination of fear, as it was of the *De rerum natura* of Lucretius, and it was natural that a man who strove for tranquillity, and thought he could find it in philosophy, should turn to the tradition which Lucretius was held to exemplify.

If Descartes is to be called an idealist, in the sense that he found the most certain truth in ideas, then Gassendi might be called a sensationalist, in that he believed the source of all our ideas to be in sensation or to arise out of sensation. Truth is of two sorts, the truth of existential statements and that of judgments. Existential sensory statements are bound to be true, for they simply express that which is. Judicial statements, however, must conform to existential statements, and consequently may be either true or false. Moreover judgments may deal with future conditions or with alternatives, and hence the mind when it is engaged in this exercise must have before it not simply a sensory presentation of colors, sounds, and other affections, but also what Gassendi, in keeping with tradition, called a *praenotio* or preconception.[4] And since there are also judgments of value, of good and bad, of useful and harmful, of what we should do and what we should not do, it is necessary also to consider the criteria of the truth and falsity of such assertions. Hence truth really falls into three categories: truth of immediate experiences, truth of reasoning, truth of valuations.

The senses then can never lie. The notion of sensory deception should be transferred to the judgments which we make about what the senses themselves tell us. The senses are not judicial; the mind is. The mind can and does make judgments about sensory data, but the sense data themselves are simply what they are. They are the confirmation of judgments and in fact the best confirmation of them. But in themselves they are not assertions about anything. When one sees a color, one cannot be mistaken about what color one sees, even if others see it differently. And so with the other sensory properties of things. When one makes a judgment about the matters of sense, then one is subject to error, as when one says that a red spot is an apple, or a real rather than imaginary apple. Yet each of these judgments must be tested by some evidence and the evidence is always either a sensation which is immediately given to one or which has been given to one. Such a concordance of opinion and sensory experience is verification. And obviously when the concordance cannot be discovered, then our judgments must be false. So far we are in the realm of common sense which demands that direct testimony, as it is called in the courts, be preferred to indirect or circumstantial. It is assumed by Gassendi that all statements of present existence are of the same sort and can be derived ultimately from the testimony of the senses. Yet he also believes that the mind can by the processes of composition, amplification, diminution, translation, and comparison build up complex or derivative ideas from such testimony. We shall see a similar theory in John Locke, who also maintained that our whole stock of ideas came from sensation or "reflection." Both men have been called empiricists and both agreed that raw experience had to be organized before it could be transmuted into knowledge. These procedures themselves which contribute preconceptions, in the technical sense of that word, to knowledge also depend upon sensation. Though Gassendi does not employ the term, they are what give structure to sensory material. We amplify a set of sensations when we imagine a giant, and diminish them when we imagine a pygmy. We compose a set when we imagine such a thing as a centaur, and we compare a set when we note certain similarities between it and another set. But more than that, a preconception gives us our notions of classes of things, gives us our definitions. For all sensation is of particulars. We build up our universals by the process of diminution through which we are able to discard those characteristics of a particular which differentiate it from other similar particulars. Since we reason by using universals, the whole structure of logic is a contribution made by the operations of the mind to the material furnished us by the senses.

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[4] The word *praenotio* was used by the Roman Epicureans to translate the Greek *prolepsis*. It was not a preconception in the pejorative sense of that word but simply the idea which one is entertaining about something which has not as yet occurred.

In matters of policy, where valuation is involved, pleasure and pain are the two passions which determine whether we approve or disapprove of anything. Pleasure which is entirely free from pain should be embraced; pain which is entirely free from pleasure should be avoided. The greater pleasure should be preferred to the lesser; the lesser pain should be preferred to the greater. This is the sum total of all ethics. It is an ethics which is clearly contrary to the Christian tradition and has its roots, as have his logic and physics, in what he believed to be the philosophy of Epicurus. But it must not be imagined that Gassendi was willing to content himself with so simple a formula. He knew very well that most men are not happy and also that most pursue pleasure and avoid pain. He knew also that pleasures seldom if ever come unmixed with pain and that often they are followed by pain. Hence the voluptuary is not his ideal man. Yet he insists that happiness is empty without pleasure, for happiness, as he never tires of repeating, consists ultimately in a painless bodily state and a tranquil mind. It is not to be found in the lives of the dissolute or sensual, in banquets and erotic pleasures. For such pleasures are disturbing to both body and mind. The use of reason is essential to the making of our choices, and it is also essential that we have the free power to choose. And both experience and common sense prove that we have them both.

The final question is that of the kind of universe in which we are to achieve our happiness. In answer Gassendi returns to the metaphysics of Epicurus, for like most philosophers he wishes to harmonize his cosmology with his ethics. The cosmos is composed of tiny particles of matter moving in the void. These particles, or atoms, are of a certain magnitude, shape, solidity, and weight. In other words, they have the primary qualities. The void, he believes, is needed to provide space in which they may move. This would seem to imply the materiality of the soul also, and he does in fact believe that matter exists in various degrees of materiality; the plants having a soul closer to pure matter, the animals having souls made of attenuated material parts. This notion of degrees of materiality was more easily accepted by seventeenth-century scientists than by us, for they already believed in the existence of animal spirits which, though material, nevertheless were extremely subtle and, as we have seen, could even be acted upon directly by the soul according to Descartes. Gassendi compares the animal soul to the "bouquet of wine," or the perfume of an unguent, as in La Fontaine we hear of animal souls as *la fleur de la matière*.[5] Since he follows the Aristotelian psychology in expounding a tripartite human soul composed of sensation, imagination, and understanding and recapitulating the vegetable, animal, and human kingdoms, it is possible that he also made a correlation between each of these sets of psychic powers with each of three degrees of materiality. But it should also be observed that not even his detailed description of the soul is supposed to give us an idea of its "inner nature." All we know is how it manifests itself in activity.

If Descartes can be said to have appeared in literary form in Racine, Gassendi can with equal justice be said to reappear in Molière. Neither playwright was a disciple of either philosopher, but the two currents of thought rose out of the schoolrooms into the salons and were as much part of the intellectual atmosphere of the time as Freudianism and the theory of relativity are of our time.

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[5] See the fable of the *Two Rats, the Fox, and the Egg.* For other fables opposing the Cartesian philosophy, see the *Discours à Mme de la Sablière* and *Les Souris et le chat-huant.*

The *Femmes Savantes* of Molière is not an espousal of everything that Gassendi taught by any means, but the philosophical satire in that play is certainly directed toward the Cartesians. The complete separation between the life of the mind and that of the body, the insistence to the point of absurdity upon precision of statement, the hints that the erotic passions are utterly evil, may be either satires of the Jansenists or of the Cartesians, though it was difficult during the third quarter of the seventeenth century to tell which was which. Men of letters are often influenced by philosophic and scientific currents of thought without being fully aware of their implications and even in ignorance of their sources. It is only in that vague sense of the word that one can speak of Molière as being a Gassendian.

2. Pascal

Though much of the opposition to Descartes came from men who followed Gassendi, there was some dissension within his own camp. His method had been adopted by some of his most serious adversaries, like the great Arnauld, who, while rejecting some of his conclusions, nevertheless, as in the *Logique de Port-Royal,* did much to popularize the technique of reaching them. The most important of such men was undoubtedly Blaise Pascal (1623–62). Pascal's claims to fame rest upon a solider foundation than his opposition to Cartesianism, for he was both a mathematician and physicist as well as one of the most forceful writers whom France has produced. Nevertheless, for our purposes he stands as one who saw some of the weaknesses of the regnant philosophy of his times, and consequently we shall make no attempt to give a complete picture or even synopsis of all his philosophic works.

In the famous amulet or *mémorial* which Pascal had sewn into his doublet and which is now printed at the beginning of the *Pensées*[6] occurs the line, "God of Abraham, God of Isaac, God of Jacob, not of the philosophers and scholars." This was a reminder to him of the distinction between philosophy and religion, between the metaphysical God and the religious God, between, if one will, the Unmoved Mover of Aristotle and Jehovah. The former was a deduction from certain observations of self-evident propositions about the universe; the latter, an immediate certainty of what he was to call the Heart. The distinction between reasoning and intuition was expressed in the famous paragraph which Brunschvicg put at the opening of his edition of the *Pensées,* in the words, *esprit de géométrie* and *esprit de finesse.* Though no translation of these terms will prove satisfactory to everyone, I shall call the former "deductive reasoning" and the latter "insight." Deductive reasoning was, of course, the method used by Descartes, and Pascal's emphasis upon insight is made in criticism of his predecessor's exclusive use of reasoning. Yet it might be replied that even the *Discourse on Method* admitted the necessity of relying on the natural light, and the discovery of the clear and distinct ideas was not made by deductive reasoning. Pascal, however, maintains not that insight is confined to the discovery of premises from which all else must flow by deductive processes, but that in any sphere of discourse insight may be called into action. There is a moment even in a series of theorems linked together by logical necessity when a man sees what follows in a flash and has no further need to proceed step by step. One might find an analogy to this when one is adding a column of figures or reading a sentence or hearing a melody. One need not add each unit to the one above it or below it; one apprehends in what appears to be a single moment the sum implied. One need not read word by word and spell out each word letter by letter to see the meaning of the sentence; one grasps it as a whole. One does not add note to note, at least in classical composition, but hears the melodic phrase as a single musical figure. So there are minds which can both reason and also see results in a flash of insight. Those men, says Pascal, who are simply geometrical require that they have explained to them definitions and first principles; they are incapable of understanding anything whatsoever unless such clarification be provided. Those who have only insight and no rational powers have not the patience to go back to first principles. But it must not be imagined that insight was to be reserved for religious, aesthetic, or moral problems, and rational deduction for scientific. Such a division would be tempting; but Pascal himself believed that both faculties were necessary in all fields, as far as one can judge from the fragmentary condition of his *Thoughts.*

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[6] I use the standard edition in the series, *Les Grands Ecrivains de la France,* edited by Léon Brunschvicg and published in 1904.

Apparently—and in the case of Pascal one can never be sure—he was impressed by the nonrational factors in all knowledge. We should be likely to call such factors psychological rather than logical. When we assent to a statement, believe in what it says, agree that the facts are as stated, we have done more than analyze its supposed premises and drawn it from them as a necessary conclusion. The sources of belief are never purely logical and sometimes may even run counter to logic. Yet we have to act on our beliefs, not on our deductions until the deductions have been accepted by us as beliefs.

As Pascal says in his most famous sentence, "The heart has its reasons which the reason knows not." But he does not say that such reasons are irrational or cannot be explicated by the reason. He is pointing either to the natural light (the *lumen naturale),* to what Spinoza called intuition, what some of the English Platonists called an active sagacity of the mind, or what others have called common sense. Or he may be indicating the actual fact that reasoning requires orientation and can only justify what from some cause or other we believe. The reasons of the heart may be upset by deductive reasoning but they are not derived from its operations. It is in his insistence upon insight that Pascal is farthest removed from Descartes, though Descartes would have done well to emphasize its contribution to reasoning itself, if necessary as a set of innate ideas.

It may well be Pascal's interest in the *esprit de finesse* which led to his well-known deprecation of philosophizing: "The true philosopher makes light of philosophy" *(Se moquer de la philosophie, c'est vraiment philosopher).* Here he follows Montaigne, as Brunschvicg points out, for Montaigne also recognized the importance of insight in all matters of reflection. But neither Pascal nor Montaigne seemed to feel the need of clarifying this difficult concept. Montaigne is too slippery a mind to capture; [7] his readers are supposed to have enough wit to grasp the full meaning of his thoughts as they glide by. But unfortunately the philosopher conceives his problem as that of making precise ideas which sometimes by their very nature must remain a hint, a suggestion, a tantalizing glimpse of something which lies behind the horizon of precision. Pascal has to be treated, at least in a history of philosophy, as if he were pushing back those frontiers to their limit. Did he then mean that insight was a special faculty of the human mind, like Bergson's intuition, or did he understand the possibility that what we call insight is the fruit of long study as well as of experience? Is it not at least possible that when a man has lived with an idea long enough, he can grasp its implications as well as its presuppositions without analyzing it? A rapid calculator in arithmetic seldom knows how he reaches his conclusions; he apparently sees them in a glance. A beginner sometimes has to count on his fingers. Any type of behavior which has to be learned, like walking or writing or speaking, begins by learning a series of steps, which a psychologist would be able to detail one by one. But as soon as the process is learned, the steps drop out of consciousness and the agent performs them without thought. The *esprit de finesse* may well be acquired through long study; yet when acquired it will seem to its possessor to have been always there. Just as few, if any, of us know how we grew out of baby talk into the traditional manner of adult speech, so the philosopher may forget how he developed those fundamental ideas and rules of procedure which either lie behind his thinking or guide it.

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[7] Cf. Montesquieu, *Pour bien écrire, il faut sauter les idées intermédiaires.* See J. Starobinski, *Montesquieu peint par lui-même* (1953), p. 27.

Since Pascal's writings on this subject are disconnected and seldom developed at any length, his readers need as much insight as he had himself to understand them. It would be agreeable to be able to say flatly that the *esprit de finesse* was, for instance, faith, or that it had its own subject matter, like the arts, or that it was given to us at birth, or that it was none of these things but something else. There is unfortunately no sound evidence in the *Pensées* from which one can reach any of these or similar conclusions. And yet if one is willing not to analyze too far, one can construct for himself a theory of the interrelations of the two kinds of thinking. Pascal, in opposition to Descartes, can be at the least credited with having pointed out that the geometrical method will not suffice for reaching the truth. For reasoning will neither give one a set of premises nor tell one what to do with them once given. The reason moves in a circle. It is an instrument for exposition, not for discovery. The heart is the discoverer and no one yet has found out its technique. When Pascal says that the more insight one has, the more differences one perceives amongst men, he is certainly speaking in praise of insight. And in such passages as this he is indicating that reason abstracts and finds general truths, certainly a commonplace, but that insight finds the peculiarities of the existent. But he is also saying that to recognize these peculiarities is to come closer to the truth about the world. He is both insisting upon the gap between logic and experience, essence and existence, reason and insight, and upon the greater importance of the latter members of each pair of terms. The word "importance," however, must also be interpreted. And for Pascal we suggest that the truths of insight were both closer to reality than the deductions of the rationalist and for that very reason were of moral and religious value. That they were closer to reality appears in another maxim (*ed. cit.*, I, 21) to the effect that nature established her truths in separation from one another, whereas art, that is, philosophy, has enclosed them one in another. In other words the picture which geometry gives us of inferences being contained in their premises is untrue to the natural order. The world then is a set of individual things each of which is describable in its own terms, very much like a picture gallery in which there is no logical connection between one painting and another, and each is, moreover, isolated from its neighbors by a frame. That this kind of knowledge is of greater moral and religious importance appears in many maxims, of which one of the most striking is that in which he points out that the man of good taste reading a book hopes to find a man and discovers an author, whereas when a writer writes in natural style, the reader expecting to find an author, discovers a man. It is precisely such writers, those who use *le style naturel,* who "teach nature that she can speak of all things, and even of theology" (*ed. cit.,* I, 30). To demonstrate the moral and religious importance of this kind of knowledge requires simply a reading of almost any page of the *Pensées* taken at random. For surely the basic anxiety of Pascal demands no proof today.

Pascal's logical skill taught him that if the world is one, there is no rational description of the whole. The reason must by its very nature classify its subjects; it deals with common nouns, universals, and it is only insofar as a thing exemplifies a universal that we can discuss it rationally. The world as a whole can be given a name: Nature, the Cosmos, Creation. Its parts can be described by comparison with other parts. But just as a man or a work of art or a historical event is more than what it can be described as being, so is the world as a whole. The famous passage on the relative scale of human affairs (*ed. cit.,* II, 72) is based upon this incapacity of ours to grasp the whole of things otherwise than by insight. Man in the natural order is "a zero from the point of view of infinity, a whole from the point of view of zero, a mid-point between nothing and the whole." He can know appearances from his own point of view but must despair of knowing the beginning and the end of things. The one mind which can understand this is its author. The end of knowledge then is ignorance. But our ignorance will give us a proper sense of humility. We are suspended between the two infinites: the infinitely great and the infinitely small, and both seemed incomprehensible at this time. Curiously enough, a rational method of dealing with the latter was developed by Newton and Leibniz shortly after this time, and in the nineteenth century Cantor developed a rational definition of the former. But one is seriously deceived if one concludes that Pascal's situation would have been alleviated by these tools. For at this point he was dealing not merely with knowledge but with feeling. His knowledge, even if perfected by mathematics, would have reinforced his feeling of helplessness. Like Bruno he saw himself caught between two extremes over which he could have no control. This vision, which he so often expressed in thoughts of terror, was a vision, not a philosophic theory. With an imagination equaled only by Dante's he visualized himself, as Whitman was to say, "seeking the spheres to connect them" and knew that only prayer and self-abasement would enlighten him. His philosophy leads him immediately into religion and rational knowledge to a comprehension of its ultimate worthlessness. "Here is our true condition: We are incapable of certain knowledge and of absolute ignorance. We drift along on a vast plane pushed from one end to the other. Whatsoever mooring we think of tying up to and making secure, tosses about and drifts away. And if we follow it, it escapes our grasp, slips away from under, and moves off in an unending flight. Nothing stops for us . . . We have a burning desire for a strong support and a final foundation on which to build a tower reaching into infinite heights. But our whole foundation cracks beneath us and the earth opens down to the abyss."

With this attitude toward knowledge, it was natural enough for him to give as one of his aims opposition to those who made science supreme, such as Descartes. For Descartes, as he says, gave God only the function of setting the world in motion and then withdrawing from the scene. Such philosophy is both useless and dubitable, useless since it does not lead to God, dubitable because even its first principles are uncertain.[8] It would perhaps be sounder criticism to say that Descartes had never reached his first principles, since he utilized methods which he had never completely analyzed. We have ourselves pointed out above that there were several ideas of which he had no doubt whatsoever, in spite of his pretensions to universal doubt, amongst which was his belief in the natural light and the complete efficacy of the geometrical method. Since the natural light varied from individual to individual and the reason relegated God to the position of First Mover, it was clear that neither was a satisfactory basis for philosophy. But here it must be said, in defense of Descartes, that Pascal laid down as one of his basic principles the independence of love and reason. When he says (*ed. cit.,* IV, 278) that the heart, not the reason, feels God, that the heart's feelings are not prompted by the reason, he was in effect attributing to what Descartes would have called a passion a cognitive power. So Rousseau in the *Profession of Faith of the Savoyard Vicar* was to insist that in religious and moral matters a nonrational power within us was supreme, and in fact even Kant in the *Critique of Practical Reason* was not far from the same position when he insisted that our moral needs could dictate conclusions to the reason. For Pascal the first principles of any truth could be discovered only by the heart. He cites as his examples (*ed. cit.,* IV, 282) our knowledge that space, time, motion, and numbers exist. We do not know such fundamental ideas by reasoning. We grasp them by means of the natural light or what later was to be called common sense. "First principles," he says, "are felt; theorems are deduced." It makes very little difference what name one gives to our apprehension of these principles, except when it is a question of their connotations. Unless logicians find some way of proving that only a given set of premises will imply a given theorem—and no such way has been discovered to date—no logical method of establishing them will be at our disposal. Here Pascal, whether one feels the force of his religious debates or not, is on the firmest ground. But it must also be granted that there is no sound way of arguing about first principles if they have no logical basis. If Pascal's feelings demand miracles and paradoxes as evidence for God's existence, that turns out to be his affair, not that of his opponents. But though his opponents may disagree about what their feelings demand, that they must have recourse to feeling, instinct, intuition, conjecture, or what is sometimes called experience, or common sense, will always be true. Pascal does not hesitate to admit that his heart and that of his fellow Christians are not like those of everyone. They have been touched by grace; their adversaries can only wait and hope for the same illumination. There is no point in reasoning with them, for reason is incapable of demonstrating the undemonstrable. This position which seemed so impregnable to its architect turned out, unhappily for him, to be unacceptable by that institution for whose sake and protection he had built it. Not only was Jansenism as a whole condemned, but the idea that faith could be used to prove God's existence was specifically condemned as late as 1840 when Bautain subscribed to the thesis that "Reasoning can with certainty prove the existence of God and the infinity of His perfections. Faith, a heavenly gift, is posterior to revelation; hence it cannot be adduced against an atheist for proving God's existence." [9]

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[8] See Brunschvicg's note to Vol. II, p. 78.

3. HUET

A third member of the anti-Cartesian circle was Pierre Daniel Huet (1630–1721). Huet, who was one of the most renowned scholars of his day, in his youth became an enthusiastic student of Descartes' philosophy, but bit by bit was not only convinced of the unsoundness of the Cartesian method but was also converted to a Pyrrhonic scepticism. His scepticism, like that of Pascal, was developed in the interests of religion, as was that of Montaigne, Charron, and La Mothe le Vayer. Since his attack on Descartes preceded the publication of his book in defense of scepticism by over thirty years, we shall discuss them in that order.

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[9] See *Enchiridion* (1622).

Huet's leading objection to Cartesianism was what he believed to be the weakness of the principle of methodical doubt.[10] For Descartes does not merely suspend judgment about the existence of an external world, the truths of mathematics, and, in short, of all our knowledge; his doubt amounts to the assertion of their falsity. But to believe in the falsity of an assertion is not to doubt; it is to believe. But equally shaky is the *cogito*. For if he were going to doubt everything, he ought also to have doubted his own existence, even when he knew that he doubted. For what is this *ego* which thinks? Has Descartes, in announcing that he is when he thinks, doing more than saying that he is when he is? Has he been able to distinguish between his existence and his thinking? Huet maintains that the reply is in the negative and that, by Descartes' own admission, the existence of the *ego* consists precisely in its thinking. He also assumes that he as a thinking being is the agent of thinking. This amounts to assuming without proof that the act of thought requires an agent, which if he had really wanted to doubt, he could well have doubted. The distinction between an act and its agent is, it cannot be denied, made by Descartes, and it is made without any suspicion on his part that it is an important distinction. Here Huet would seem to have put his finger on a weakness in the *Method* which has seldom been seen. When, however, he adds that a man who could doubt of his own existence could also doubt that he is thinking, he clearly missed the point. For since thinking and doubting were equivalent, in that doubting was a species of thinking, all Descartes could be said to have maintained was that when we doubt, we cannot doubt that we are doubting. That, it is obvious, would not have carried him very far along his road to the construction of a philosophy, but regardless of that, he should not be accused of errors which he did not make. Similarly when Huet interprets the *cogito* as if it were a syllogism, he is also beside the mark, for Descartes never maintained that it was one.

Among the things which Descartes might have doubted were the rules of logic. And Huet is right again when he points out that he took them for granted. We have pointed out above that Descartes' belief in the natural light was suspended, and it was probably the natural light which led him to the acceptance of these rules. When Descartes insists that "it is self-contradictory that that which is thinking should not exist while it is thinking," the self-contradiction appears only in the illumination of the natural light. Why then was he willing to accept some things according to the natural light and not others? Why was the existence of a thinking agent necessary and not the truth of such an axiom as that the whole is greater than any of its parts? Both turn out to be justified only by the natural light and Descartes gives us no principle by means of which we can accept some of its discoveries and reject others.

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[10] The title of the work is *Censura philosophiae cartesianae* (Lutetia Parisiorum, 1689).

There is, furthermore, a threefold ambiguity, says Huet, in the word "thinking." There are the thinking mind, the subject matter of thought, and the action of the thinking mind upon that about which it is thinking.[11] This is not merely a lexicographical exercise on Huet's part, for he points out that since the word "thinking" is used by Descartes to name all the mental faculties, it must also name the affections, in which it is assumed that something is done to the mind, that is, the mind is not purely active. If that is the case, then it must be of a nature capable of receiving influences from without and is not merely the thinking subject. But that in itself seems to imply that there is a world of things external to the mind and one need not have recourse to the veracity of God in presenting us with a world of possible experiences. This, as readers of nineteenth-century philosophy will observe, is a curious anticipation of later dialectical proofs, proofs which depend upon the supposed implications of ideas, or better, the implications of the sentences which express such ideas. Whether one has confidence in this manner of reasoning or not, it became one which was to be dominant in the German idealistic tradition and in fact has intimate relations to the Cartesian method itself insofar as the *cogito* is concerned. Huet, then, is attempting to use Descartes' own first principle as the initial premise of a philosophy and to draw out of it implications which were not seen by its author.

Again, Huet maintains that if the *cogito* is both thinking and the awareness that one is thinking, two mental acts are involved, and the second really is a matter of memory. For one cannot at the same time have an idea and the idea of that idea. Therefore, he says, since "I think" and "to think" are two separate ideas, the former does not mean and cannot mean, "I am aware that I have been thinking." If then memory is called upon to assert that one has been thinking, there is always a theoretical possibility of error when one asserts, "I am aware that I have been thinking." There is no more certainty in this assertion than in the assertion that I am aware of having walked or eaten or slept. Hence, he concludes that the proof of one's existence from the *cogito* is far from indubitable. And if one maintains that, regardless of the laws of logic, I am aware of myself in the act of thinking, then one relies upon the natural light, and why restrict its operations to self-consciousness? Why not continue and maintain that we also know the axioms of arithmetic in the same manner? How can one doubt that equals added to equals give equals, and yet not doubt that one is aware of oneself thinking? Huet here is insisting on the necessity of more assumptions than Descartes was willing to make. And his insistence arises from his observation that Descartes makes more assumptions than he is aware of. Again, when Descartes says that God cannot be a deceiver, Huet is only too happy to agree, for he is a Christian. But, he says, "We are arguing here from reason, not from faith, from philosophical, not from theological principles." And from such principles we have no way of knowing whether God is a deceiver or not. "As a philosopher, you do not know . . . what God is, what He can do, what He wishes." On the other hand, even if God is not a deceiver, can we argue that He must have made us so that we cannot be deceived? For we are often deceived in fact.

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[11] In Huet's own words: Tribus rebus constat omnis cogitatio; mente cogitante, re menti cogitanti objecta, mentis cogitantis actione in rem objectam. *Ed. cit.*, p. 18.

Huet now turns to the followers of Descartes, *recentiores quidam Cartesianae doctrinae patroni,* who say that though we may be deceived when we reason, yet we could not have been made by God such that we would be deceived in the apprehension of simple ideas. Such apprehension is vision. But they give no reason why the vision of a simple truth, such an arithmetical axiom or the *cogito,* should be any more veridical than reasoning. Why should they be so doubtful of their premises and so certain of their conclusions? Such men are sceptics in their beginnings, dogmatists in their conclusions *(Pyrrhones in aditu, in exitu meri Pythagorae).* For if even the principles of mathematics can be doubted, and they are doubted by such Cartesians though apprehended as clear and distinct ideas, then we can be deceived by direct vision as well as by reasoning. The upshot of all this is that Cartesianism stops doubting at precisely the point at which doubt should arise, and no certain criterion of truth is given us beyond the faith which is required by religion. If this is so, then why not start with religion and admit the vanity of all philosophizing? We are not far here from Pascal's thought that to ridicule philosophy is to philosophize.

Huet's critique of Cartesianism is extended to cover the theory of the criteria of truth, clear and distinct ideas, the proofs of the existence of God, and the duality of mind and body. Briefly, he attacks the doctrine of the absolute truth of clear and distinct ideas on the ground that it amounts to nothing more than faith in the natural light and in God's unswerving veracity. For some ideas which seem clear and distinct to some people turn out to be false, some true ideas seem clearer and more distinct than others, and no idea is so false as not to have some clarity and distinctness. (He might have added that if one had a completely obscure idea, one would never know whether it was true or false since one would not presumably know what it meant.) In short, Descartes is simply saying that a true idea is true and gives us no real criterion of truth. The criticism here has a certain sting. But when Huet attacks Descartes' dualism, his criticism, though full of common sense, fails to understand the method by which the doctrine is reached. Huet maintains that though Descartes first is aware of himself thinking, yet he could not think unless he had a body. That in fact may be true, but it is beside the point. For Descartes was looking for what was implied in the concept of a mind, that is, thinking, not what was believed to be necessary in order for a mind to think. It is very strange that so acute a critic as Huet did not see this. But in it he was not alone, for Gassendi had also assumed much the same attitude.

It will be recalled that one of Descartes' main theories concerned the existence of innate ideas. Certain ideas which he believed could not have come into our minds from perceptual experience, such as the idea of God, must have been expressions of innate thoughts. "When Descartes writes . . . that those eternal ideas, for instance, the axioms of geometry, have been written into our minds by God, as laws are given by the King to the minds of those who obey his rule, he confesses that there is a distinction to be made between ideas and the faculty of thinking. Nevertheless let us thank Descartes, and so we may interpret his opinion conveniently, that an innate idea, for instance, that of God, is a mental faculty of thinking generated within us in a certain sure manner; wherefore every time that the mind thinks, the idea of God will arise in it." But how does such an idea differ from any other? Even a fiction will arise every time the mind thinks of it. We form an idea of Alexander, and every time we think of Alexander the idea of that king will arise before us. But in the latter case we know the source of the idea in experience. In the former we do not. But we do not find the ideas themselves in experience; we find only the things which give rise to the ideas. Thus we may form universal ideas from our knowledge of particulars; but no particular actually has the character of a universal. Just as in Peter and John and other individual men we apprehend that they are animals furnished with reason, yet by the inspection of neither

Peter nor John nor any other individual man can we educe this and compose into a unity that which was multiple, to say nothing of constructing and erecting that general and universal idea, and asserting that every man is a rational animal. We must therefore conclude that any universal is as innate as any other and that the idea of God or of the mathematical axioms is no more innate than others. But we know that such universals as the rationality of man are not innate, nor does Descartes say they are. But if they are not, how does he justify the distinction between those that are and those that are not?

So much is sufficient to indicate roughly Huet's objections to Cartesianism. But his own philosophy is to be found in the posthumous *Philosophical Treatise of the Weakness of the Human Mind* (1723). This book, probably composed about 1690,[12] was kept in manuscript and shown only to a few intimate friends during its author's lifetime. The reason for this can only be guessed, but guessing is not difficult once one has read the volume. For Huet in it tries to demonstrate the weakness of the reason and the necessity of faith which is suprarational. Though this might appear to bolster the cause of religion, actually the ecclesiastical authorities have never been willing to accept a doctrine which did not grant certainty to the reason within its own sphere. Huet, however, was unwilling to grant it even limited sovereignty. His motivation, as he gives it in his introductory chapter, is the familiar one of many a pious sceptic: that no certainty is to be found in philosophy, as is proved by the dissensions not only amongst philosophers of various schools but also amongst those of a single school. He concluded from his reading that philosophy "was not so much a search for the Truth, as the philosophers boasted, as a method of clever chicanery and subtle disputation." He then turned, he says, to Diogenes Laertius and found in the accounts of the sceptics what he was looking for. Though he could not agree to all their opinions, yet he could agree that the human mind by itself could not attain certainty and that the source of all our errors was the precipitation of our minds, "which makes us give our faith too lightly to the opinions which have been proposed to us." In that spirit of scepticism he breaks up his study into three parts: the weakness of the human reason, the best method of philosophizing, and answers to objections.

In order to analyze the procedures of the reason, Huet opens his discussion by an exposition of the nature of the understanding. The understanding is the reception of impressions made upon the brain by nervous currents stimulated by external objects.[13] This is briefly, and in its general features, the thesis of the empirical tradition in philosophy, whether it is expressed in terms of atoms and eidola by Democritus; or of air waves, auditory end organs, afferent nerves, and the cortex. The details are, to be sure, entirely different, but it is important to note that Huet expressly points out that he is not continuing the Scholastic tradition of sensible species, in accordance with which the mind received qualitative duplicates of the various sensory data, colors, sounds, and the like. Thus, for him an idea is not an image or duplicate or anything in the external world, but an effect made upon the soul by a disturbance in the brain. These effects of cerebral events are then acted upon by the understanding to the end that they are compared and judged. Distinguishing between truth of existence and truth of judgment, Huet asserts that a judgment is true when the understanding relates the ideas "which are in us" with the objects from which they ultimately arise. Since the understanding must make the comparison between the two beings, the idea and that of which it is the idea, it is clear that difficulties will arise in being certain of the truth of any judgment. One might expect that a philosopher who had begun with an empiricist technique might continue with it. It would be normal for him to point out the difficulty, if not the impossibility, of comparing an idea with that of which it is the idea, since, as every Freshman learns, if we know only through ideas, we cannot grasp their subject matters directly.

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[12] See *Traité Philosophique de la foiblesse de l'Esprit humain, avertissement,* p. vii.

But Huet begins by pointing out that there are some things which we know with the highest certitude, namely the truths of religion, of which we can have no rational knowledge. In other words, he does not reject ideas which cannot be known rationally; he rejects rationality. The truths of revelation are no less true for being nonrational and nonempirical. The Bible is full of passages which demonstrate our intellectual weakness; and as Huet was an erudite bishop, he could put his hands on page after page of scriptural texts to fortify his statement. St. Paul, Arnobius, Lactantius, St. Gregory Nazianzen, St. Augustine, and other fathers and ecclesiastical writers are called upon to testify to the fallibility of the human reason in questions of dogma; and the use of dialectic to prove the certitudes of faith is ridiculed. Now the only way open to the critic of Huet at this point was that of denying the truths of faith. But that way was too rocky for most men to follow. Either, then, an idea could be true and yet nonrational or it must be false if nonrational. Huet may have thought that he was defeating the rationalist by his insistence upon the nonrationality of dogma. In reality he was clearing the road for such people as Bayle and the anti-Christians of the eighteenth century. In order to fortify faith he attacked reason.

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[13] The anachronism of my language is deliberate. Huet himself says that the human mind is "Un principe, ou un Pouvoir né dans l'homme, lequel est émeu & ébranlé à former des Idées, & des pensées, par la reception & l'impression des Especes dans le cerveau. Ces Especes dont je parle, ne sont pas ces Images, ou Ombres qui partent des corps, que l'on appelle aussi Especes; mais j'entens les traces imprimées dans le cerveau par le mouvement des esprits & des nerfs, lors qu'ils sont ébranlez par les organes de la sensation, excitez par des causes exterieures: laquelle impression de traces fait que l'Ame jointe intimement au cerveau, se trouve disposée d'une certaine manière." *Ed. cit.*, p. 13.

Having disposed of dogma, which has the highest certainty and yet is not open to rational justification, Huet turns to more earthly matters. To demonstrate, he says, that any empirical proposition is true, one must be sure that the idea one has of an object resembles the object itself. But that is impossible, for the effect upon the nervous system of the object may modify to some extent the appearance of the object, and usually does. This is easily demonstrated, as it was to be over and over again in later years, by pointing out that if one has an idea of, let us say, a tree, the tree is visible, immobile, and solid; its image is invisible, is not solid, and is "very mobile, very thin, and very fluid." The reason why it is invisible is, Huet believes, that though it stimulates in us the judgment which we make of its object, we see the object, not its image. Just how this occurs is left unexplained, as if Huet did not see the problem involved in the situation. If the image is actually the impression made upon the brain, then of course it is invisible; but if it is invisible, then there is no way of knowing what it looks like and its very existence is asserted by inference. The term "image" in that case is justified only by tradition, according to which physical objects emitted "sensible species" of themselves which entered the mind in various ways which do not concern us here.[14] Certainly Huet may be said to have thought of them as a psychologist today would think of whatever happens in the visual area of the cortex when an afferent nerve current from the eye reaches it. For his argument continues to show how various accidents might modify the image to the point where its resemblance with the object to which it refers was extremely attenuated. It has, for instance, to traverse a medium which may distort it; if visual, it will vary with illumination; if distant, its size will be much smaller than that of the object from which it emanates; regardless of its sensory organ, it will vary with our state of health, age, fatigue. In short, Huet here revives the tropes of Aenesidemus which he found in Sextus Empiricus and which were constantly introduced to weaken men's faith in sensory knowledge.

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[14] Those curious about how such ideas spread out of philosophy into literature might consult Donne's lines in *The Ecstasy*,

> Our eye-beams twisted, and did thread
> Our eyes upon one double string . . .
> And pictures in our eyes to get
> Was all our propagation.

The sensible species when visual came toward the eye on a beam shot out from the eye. But of course there were other explanations of how they became incorporated into the totality of our knowledge. Why they were supposed to resemble their objects I do not know.

To such objections are added the difficulty of knowing things which are in a constant state of flux, of attaining over-individual knowledge in view of the individual differences in men and the interconnections between things which makes the universe a network of related things which stretches well beyond our intellectual grasp. If one wishes to know what a man is, one has to know all about his soul and his body. But if one begin with the body, one will have to know all about the four elements which compose it. And to know the elements one will have to ascend to the first causes of things, which are unknowable. If one start with the soul, one will have to inquire "what it is, where it is, how it acts, what is the effect of its action, how it is joined to the body. When all that is learned, one will have to ask what the reason is, what is its right use, what are its effects. This study will lead you into the study of all of dialectic. The matter will proceed *ad infinitum*." Life is too short to permit us to attain such wisdom. After similar arguments about the inefficacy of the reason, and an appeal to all the various philosophers of the past who have maintained similar theses, Huet concludes that neither perception nor reason are reliable guides to truth. Thus the only philosophers who can never be deceived are those who assert nothing. This amounts to saying that if one keeps silent, one will never be contradicted. But that both he and his fellow sceptics use perceptual and rational evidence to prove their points seems of little importance to him.

The outcome of this is that one must turn to faith to provide us with that truth which reason cannot find. We have to live in accordance with some ideas which we will accept as true, and if such ideas are probable, that ought to be enough. Such probability is not that of the statistician; it is not calculable. It is rather the psychological probability of ideas that are tested by that vague criterion known as experience. In ethical matters the precepts revealed by God will guide us, and, just as true happiness cannot be attained on this earth, so ultimate truth must always escape us.

Yet we can always manage our lives without philosophy; the proof is that most of us do so. So the man innocent of science can still believe in God and does, can run his business without philosophy and does. If the traditional argument against scepticism, that it is a self-refuting theory, is raised, Huet replies that he does not assert that all knowledge is always vain, but that, on the contrary, some ideas are true and some false, and that, other than those which are based upon faith in revelation, we have no certain way of distinguishing between them. We can, however, test some of them by what we know through faith, and if they are in agreement with faith, then we can accept them as true. This is the outcome of Huet's scepticism. The whole book is an apology for the program "I believe in order to understand." As such, it will be the target of ridicule by rationalists and empiricists as well. But Huet, whatever his weaknesses may be, realizes that formal reasoning must have a program. It is for him the art of substantiating ideas which one is already entertaining, or, if one prefer, the art of achieving consistency. Faith and common sense give us that which we wish to prove. It will not be any the less certain if unproved, but we will feel more comfortable if we can give demonstrations of our beliefs. That is justifiable, he believes, but we must not take it too seriously. As Bradley was to say in the nineteenth century, metaphysics is the giving of bad reasons for what we believe on instinct.

The technique of Huet was not very different from that of Bayle, his more famous contemporary. We shall, however, postpone our discussion of Bayle until we shall have treated philosophers in other countries and of other tendencies preceding him.

CHAPTER 6

The Empirical Tradition in England

WHATEVER may be the reason, philosophy in England in the sixteenth century was largely Scholastic. Unless one wishes to expound the works of philosophers like Kenelm Digby and William Temple, one is forced to follow tradition and begin with Bacon and Lord Herbert of Cherbury. Both men initiated philosophical movements which were reciprocally antagonistic. As in Renaissance Italy we had to distinguish between an empirical and a Platonistic tradition, so we shall have to do likewise in treating of England in the seventeenth century. But whereas in France we could center attention on the great figure of Descartes, in England we find that neither empiricists nor Platonists can be grouped about one dominant figure. Bacon's major interests were scientific; Hobbes, Locke, Berkeley, and Hume, though their views had implications of scientific importance, were more interested in epistemology, politics, and metaphysics. Moreover, whereas the Cartesians and anti-Cartesians were bound to consider the reaction of the Church to their doctrines, the English philosophers, whether empirically minded or not, could not be tried by the Inquisition, imprisoned for their views, nor otherwise punished by ecclesiastical courts. Like Spinoza they were free to go wherever logic led them. And though the Established Church did have a codified set of dogmas, a certain latitude always existed among the beliefs of its members. Finally, though the doctrines of this Church are usually classed as Protestant, it is worth pointing out that there was no outstanding reformer in Great Britain to compare with Calvin, Luther, or Zwingli. Thus, for some reason or other, and here one can only make more or less plausible conjectures, British philosophy and science, too, were much more fertile in the variety of their ideas than those of the Continent. To say this is not to depreciate the work of those Italians and Frenchmen whom we have already discussed. Bacon is not Montaigne, Henry More and Cudworth are not Pascal, and Berkeley is not Malebranche. But it would look as if the lack of an orthodoxy in Great Britain produced also a lack of heterodoxy, and just as various Protestant sects flourished in England and Scotland and could not be downed, so various philosophical sects arose. For those who believe in unity, this will be considered to be a misfortune. But those who believe that truth is reached only through discussion, that ideas must always be challenged by other ideas, will find here support for their belief.

1. Bacon

Francis Bacon (1561–1626) was a younger contemporary of Montaigne and of Telesio and was not much older than Campanella. That he had read Montaigne is clear from references to him in his works.[1] But the references to Telesio are numerous and he is recognized by all students of Bacon as having been a strong influence upon him. Whether his own *Essays* owe much of anything to his French predecessor will have to be judged by others. He seems to have paid little if any attention to Campanella, though his own imaginary commonwealth, *The New Atlantis,* must have been written a little after Campanella's *City of the Sun.* Imaginary commonwealths were by that time, however, popular, and Bacon hardly had to go to Campanella for his model. As for Telesio, there is a famous passage in the *De principiis atque originibus* in which Bacon says, "Of Telesius himself I have a good opinion, and acknowledge him as a lover of truth, useful to the sciences, the reformer of certain opinions, and the first of the moderns." The whole work as we have it is, in fact, an outline of the opinions of Telesio on cosmology, but it is not a statement of Bacon's agreement with them. He approves of the problem which Telesio set for himself and in general of the method which he followed. But he does not hesitate to criticize much of it severely and notices that it would be more plausible if Telesio had not considered the world as if man were removed from it. Removing man from the world leaves the world a system of matter in motion, permits one to conclude that the cosmos is eternal, and that therefore it had no beginning and will have no end. Since Bacon could not imagine a world without man, to say nothing of imagining it as never having been created, the natural philosophy of Telesio was bound to be repugnant in its principles. Bacon cannot then be said to be a disciple of Telesio, though he had studied and admired him.

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[1] See the *De augmentis,* Bk. VIII, Vol. V, p. 64 of the edition of Spedding, Ellis, and Heath, and the essay on *Truth,* Vol. VI, p. 379. I quote their translations except where otherwise noted. Of course if Bacon is also Shakespeare, the influence of Montaigne is much greater.

Bacon's chief contribution to philosophy is to be found in *The Great Instauration,* dedicated to King James in the hope that as he, Bacon, had provided the method of reaching solid truths by outlining an experimental method, the king would set up a means for collecting the facts upon which the method might be used. That a new method was required was demonstrated by the futility of the sciences as they existed at that time. Bacon wants a science "unincumbered with literature and book-learning," a science which will be an organization of experimental fact. In wanting a new method, he was in agreement with the great innovators of his age. It was the same desire which stimulated Descartes, though the method of Descartes was very different from that suggested by Bacon. Both men were faced by a discouraging array of books in which there were presented almost innumerable theories about the world and things which are in it. Some men, like Agrippa von Nettesheim and later Huet, turned their backs upon the accumulated stores of knowledge and maintained that truth was beyond man's grasp. But the optimism of Descartes and Bacon was such that they were willing to argue that the cause of our failures was not our innate weakness, but rather the use of the wrong technique for discovering the truth. Neither man suspected that a method could determine to some extent the nature of the truth to which it would lead. If the Scholastic method is to be held responsible for the doctrines which it helped formulate and prove, then it might have been suspected that method in itself would always prejudice the results of whoever used it. One can find in the seventeenth century a quantity of criticism of traditional method, but little investigation into precisely what there is in a method, in any method, which would color the truths which it discovers. Bacon saw clearly the contribution of Telesio's procedure to his results; he saw that by the assumption of two forces of expansion and contraction as the exclusive agents in the formation of the universe one would be driven to a belief in the eternity of the world. But is that the result of Telesio's method or of his premises?

The problem which Bacon gives as his initial starting point is why there has been progress in the mechanical arts but none in philosophy, which for him, of course, includes the natural sciences. Whatever progress in knowledge he himself has made, he says is attributable to his having wedded the empirical and the rational faculties together, "the unkind and ill-starred divorce and separation of which has thrown into confusion all the affairs of the human family." This marriage will produce an increase in utility and power. Second, its utility will be increased only by the co-operation of all. That knowledge is power and that power is desirable, Bacon takes for granted. Knowledge as simple contemplation is not for him. If the Scotist God descended into Machiavelli's Prince, the Prince now becomes transmuted into Bacon's man of science. The Prince made right and wrong by the free exercise of his will. The Baconian scientist wants power, and that desire is to determine the truth in the long run. For knowledge that is useless is to be discarded, and though the useless is not declared to be false, the truth is to be valued for its results. Bacon is far from some pragmatists of the twentieth century who seem to say that utility constitutes truth, though it is a question whether they mean it or not. But he has taken the first step toward that end by making a sharp distinction between the knowledge which is power and that which is not, and the second step by asserting that the knowledge which is not power is hardly worth seeking. If there is any truth in the suggestion that one's method determines in part one's results, then a method which will lead to the increase in man's power will also determine in part its employer's results. The moment that the precise contribution of a method is determined is the moment when one sees the sense of intimately relating truth and utility.

Bacon's method of acquiring knowledge is that of purging the mind of its disposition to error. Presumably he is optimistic enough to believe that given the right means to an end, man will use them rightly. Man has a natural disposition to know. He will find the truth as soon as he knows the road to it. Bacon might have asked himself why men had not perceived the weakness of their method before he came upon the scene. Why did they not realize that they had not found truth and that maybe the reason was their faulty method? Or he might have raised the question of why they were satisfied with the kind of knowledge which they had. He admits that philosophy had to all intents and purposes been as immobile as a statue since the days of Aristotle. If he had raised this question, he might have seen that men will retain a set of ideas which tells them what they want to know. If the purpose of a man's inquiry is practice, as soon as he finds a satisfactory way of improving his practice, he will cease further research. If his purpose is a harmonious description of the universe in terms of four elements, four natural positions, final causes, and all the rest, he will be content when he has achieved that. That knowledge is in part controlled by the problems which one has set to one's mind should have been obvious. But Bacon, and indeed most philosophers, have refused to consider knowledge as the accumulated answers to specific problems. Consequently they have not understood why so many people have been so satisfied with assertions which are the answers to obsolete problems. If the history of philosophy shows one thing more clearly than any other, it is that no question will be pursued beyond the point at which the questioner is satisfied. That point is not determined by logic or other a priori means. It is the point at which the various sciences are cut off from one another, though the sciences too are collections of questions and tentative answers.

Be that as it may, Bacon was engaged in a plan to purge the human mind of its habitual errors. He was far from the simple sensory empiricism of Telesio. He believed that sometimes the senses gave no information, sometimes false information. For some things escape sensory detection, being too small or too subtle, too distant, too swift. Others have reference to men only and not to nature. Consequently, Bacon proposes to set up a method for correcting and helping the senses, not so much by inventing instruments of observation, as by devising a technique of experimentation. "To the immediate and proper perception of the sense therefore I do not give much weight; but I contrive that the office of the sense shall be only to judge of the experiment, and that the experiment itself shall judge of the thing" (*ed. cit.* IV, 26).[2] This sentence marks off the thought of Bacon from some empiricists who have maintained that not only all knowledge but even the universe itself could be reconstructed out of sensory data, colored patches, sounds, smells, and the like. Bacon is not an empiricist of that stripe. He realizes that all knowledge must be sought from sensory perceptions, but those perceptions must be judged, weighed, and measured as evidence of truths which they indicate but do not embody. If the human mind were what it was later to be called, "a blank wax tablet," then there would be no difficulty about knowledge. But unfortunately it is warped by prejudices, some of which are innate, and thus must be always guided, corrected, disciplined. These prejudices are the famous four Idols. Those which "come into the mind from without," either from inherited doctrines or from the "perverse rules of demonstration," can be corrected. But those which are innate are incorrigible. One can, however, point them out and lay it down as a rule "that the intellect is not qualified to judge except by induction, and induction in its legitimate form" (*ed. cit.,* IV, 27). Induction, as he understands it, will begin with particulars which are reached after experience has been analyzed and taken to pieces. These particulars would not be the heterogeneous collection of *things* which we meet as we wander over the face of the earth. Bacon insists that they are rather the results of an analysis, what Professor Loewenberg once called "post-analytical data."[3] Just how this analysis would proceed Bacon does not tell us clearly. That he indicated the need for it is worthy of praise, but the concept itself requires greater definition. For there is a kind of logical analysis which consists in breaking down a proposition into those which are needed to prove it. There is another kind which breaks down a total complex of ideas into those elementary ideas which are logically independent of one another. This would be analogous to reaching the clear and distinct ideas of Descartes. There is also the kind of analysis which is performed in analytical chemistry in which certain substances are subjected to reactions with others or to electrolysis or to similar operations, and the result is two or more substances which are more elementary than the original substance. In all these instances the elements which are found are, of course, determined in part by the operation used to find them. And that operation is itself dependent on prior theoretical considerations. Thus the analysis of matter in ancient times into the four elements was harmonious with the relative places at which they came to rest when set in motion, or the places toward which they tended to move when unimpeded. But Aristotle's analysis of them all into compounds of the hot-cold and the moist-dry continua was based on the simple observation of sensory properties which they all shared in common and the logically possible combinations of them: the hot-dry (fire), the hot-moist (air), cold-moist (water), and cold-dry (earth). Bacon nowhere gives us anything resembling a precise account of how he is to conduct his analyses, which can only be analyses of problems about things, not of the things themselves. It is doubtful whether he was aware of the difficulties involved, nor could one who is so pre-eminently an innovator have been expected to be.

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[2] I shall use Roman numerals to indicate the volume, Arabic the page in the edition cited above.

The first step in the application of the new method, found in the Aphorisms of the *Novum Organum,* is the mind's purgation of its prejudices. Though these are generally well known, it will do no harm to list them here, pointing out that the name "idol" does not mean the sort of image which heathens are supposed to worship, but rather phantasms which mislead men. These Idols, then, are four in kind: the Idols of the Tribe, the Idols of the Cave, the Idols of the Forum, and the Idols of the Theatre or lecture hall.

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[3] J. Loewenberg, "Pre-analytical and Post-analytical Data," *Journal of Philosophy,* XXIV, No. 1 (1927), p. 5.

The Idols of the Tribe, inherent in human nature, might have been called the human equation. As a race we tend to suppose more order and regularity in the universe than we find, to neglect negative instances which might upset our preconceived ideas, to make generalizations hastily, to indulge in infinite regresses and progresses, to seek final causes, to succumb to "wishful thinking," to accept uncritically the evidence of the senses, and to substantialize abstractions.

The Idols of the Cave are those prejudices peculiar to individuals, whether innate in the person's constitution or acquired through education and the environment in the larger sense of that word. Subservience to this Idol leads men to select some one subject in which they are interested and to relate everything else in the universe to that, as Aristotle, says Bacon, related everything to his logic and Gilbert to magnetism. This would seem to betray an anti-monistic assumption on Bacon's part, but in all probability he is simply warning his readers against assuming the existence of greater unity than they actually find. For he continues his discussion by pointing out that some minds "are stronger and apter to mark the differences of things, others to mark their resemblances" (*ed. cit.,* IV, 59, aph. 54). One should watch oneself carefully lest one be misled by one's own tastes in this matter rather than by the evidence. But against Bacon it might be argued that explanation consists in finding unities where diversities appear to preliminary investigation. The unities, it is true, are of various types: unity of origin, of purpose or end, of matter, of structure. But the lesson which Bacon teaches is that we should all be suspicious of that upon which we dwell with special satisfaction, lest our love for a kind of thinking betray the truth.

Idols of the Forum are said to be the most troublesome of all. They arise from the assumption that words always name existent things. Yet there are words for non-existent things and there are existent things which have no names. Though Bacon's account of this most troublesome Idol is far from precise, he seems to believe that if we start with the names of things which have perceptible differences, we shall not go far astray, but as soon as we group things together into larger classes, error is likely to be committed. For, to use his own examples, names of substances "of the lowest species," such as chalk or mud, can do little harm, presumably because all examples of chalk and mud are highly similar. But when one proceeds to use the name of earth for the supposed element, then trouble will ensue. The similarities which make the use of a common name legitimate are those "that fall within the range of the human sense" (*ed. cit.,* IV, 62), but the modern scientists would be deprived of much that gives their science weight if they had to restrict themselves to sensory impressions when classifying the subjects which they study. This protest of Bacon's was nevertheless of great importance, for he was attempting to purge science of concepts which were to turn out to be useless as time went on. But the trouble with the four elements was not that they were generalizations of common properties which could be found only on a high level of abstraction, but that the similarities in question were useless in the formulation of the kinds of law which were desired in the seventeenth and eighteenth centuries. That kind of law was mathematical, and there was no way of dealing with the qualities which both differentiated the four elements from one another and also defined each element, the hot-moist, cold-moist, and so on, without translating them first into quantities or velocities, or something which could be measured. It is of course true that the chemists who followed Lavoisier gave up the theory of the four elements and adopted a theory which at first sight seemed much more complicated. But in its turn this type of theory developed into modern atomism with its use of atomic weights as differentiae, and for a time it looked as if the only difference between the elements, as they were discovered one after another, was something quantitative.

The last of the Idols, those of the Theatre, are put into our minds by lecturers; they are the effect of inherited learning. In discussing this Idol, Bacon inveighs against all the dominant systems of explanation, for none of them seems worth preserving. In their place is to be introduced experience supplemented by reason.

Experience for Bacon is not, as we have seen, bare sensory perception. Bacon is neither Hume nor Auguste Comte nor a member of the Viennese School nor a contemporary Analyst. In fact, he is not an epistemologist in the sense that Hobbes or Locke or Berkeley were epistemologists. He is developing a method of scientific procedure, not a theory of how ideas arise in the mind and a solution of the problems which ensue from assigning to them some one source. He readily admits that science is more than the collecting of so-called "facts"; it begins "with experience duly ordered and digested," from it "educing axioms, and from established axioms again new experiments" (*ed. cit.,* IV, 81). This means that experience itself has to be questioned before it will say anything. To

Bacon the two greatest methodological evils have been pure empiricism—the simple amassing of data, and pure rationalism—the spinning of unsubstantiated theories out of dogmas and general principles. His own methodology is to be a fusion of both, empiricism organized by rationalism, rationalism built upon experience. Thus Bacon is far from disdaining axiomatic science; but he insists that the axioms must arise from the data themselves, by small steps of generalization. He assumes obviously the possibility of generalization and he assumes the desirability of it. But since he always has in the back of his mind the practical value of science, he sees no point in urging the formulation of principles so general that they will cover everything.

The force of this appears in the very opening of the second book of aphorisms "concerning the interpretation of nature and the Kingdom of Man." The purpose and work of human power, he says, is "to generate and superinduce a new nature or new natures"; that is, to make new things, to transform things, production. On the other hand, the purpose and aim of human knowledge is to discover the form "or true specific difference," "or nature-engendering nature, or source of emanation," which results in change. He has the idea that everything that changes changes because of some principle or cause which is not resident within itself. In reality this is the old mediaeval, in fact, classical assumption that things would never change of their own accord. The manner of the change is called by him the Form and it is Form which he is seeking. He is certain that in nature only individual things exist, but their behavior occurs according to fixed laws and the fixed laws express the Forms. He could have stopped here and asserted that he had no evidence that the various Forms could be organized into a general unitary system of Forms. But I suppose that such a radical pluralism could not have seemed reasonable even to a revolutionary mind in the seventeenth century. No one at that time, it is safe to say, would have been willing to assert the fundamental discontinuity of nature. For the very belief in a single Creator of the universe whose mind was rational would have deterred anyone from making such an hypothesis. And even if one were given to theological doubts, he would not have doubted this. The Deists and other supporters of natural theology were agreed that the world manifests a single order and that the order manifested is rational. By "rational" they meant an order which might be explained as a set of theorems susceptible of logical arrangement running from the logically prior to the posterior. Bacon's revolution was a protest not against that thesis but against the specific laws and orders which had been developed up to his time. To discover then the true Forms, or causal laws, was to discover information which would alone help one to invent as well as to uncover novelties.

That the Forms are causal laws appears in the fourth axiom of the second book of aphorisms which states among other things that "given the Form the nature infallibly follows," and in the absence of the Form, "the nature infallibly vanishes" *(ed. cit.,* IV, 121). This is so far only the common procedure of all causal inquiry (which was erected into a canon of induction by John Stuart Mill in the nineteenth century as the Canon of Agreement and Difference), but since Bacon also believes in the rational structure of the universe, he assumes without proof that Forms themselves are organized into a system running from most general to least. This is analogous to the opinion that the hierarchical order of classification parallels the existential order of the universe. The things themselves, the only ultimate existents, are not so arranged; but the laws which describe their behavior are. The Forms, however, are but one side of scientific inquiry; the other side is the investigation into the "common and ordinary course of nature," expressed in words which have passed out of usage, such as the efficient cause, the latent process, and the latent configuration. Bacon believed, as most of his contemporaries did, in inner natures, and when he pleaded for an investigation into these latencies, he was undoubtedly imagining physical objects, whether inorganic or organic, as having a peculiar kind of stuff making them up, peculiar ways of behaving, and peculiar structures which were hidden from ordinary observation. For he gives as one example of latent configuration the anatomy of the human body which was latent so long as dissection was not practiced. If he had not been obstinately opposed to atomism, he might have concluded that the latent configuration of inorganic substances was the spatial organization of the atoms. But it must be granted that his thoughts did not carry him that far. Moreover the discovery of Forms was of greater interest to him.

The outstanding instance of an investigation into Forms is the famous one of heat. Bacon begins by listing all the instances of things which are hot or which give off heat and discovers his instances by common-sense observation. The list therefore includes the sun's rays, fiery meteors, all flame, frictional phenomena, animals, animal excrements, and even the sensation of heat produced by keen and intense cold. This first table is called the Table of

Essences and Presence. In drawing it up one has simply to know what experience is named by the word in question and to make an inventory of all the cases where the thing named is present. This is to be corrected by a second table of those experiences in which the thing named is absent, a Table of Deviation and of Absence in Proximity. Bacon has been accused at this point of ordering scientists to do the impossible. For if one adds up all the cases in which a problematic phenomenon is present and those in which it is absent, clearly one would have the whole universe on one's hands. But to provide against that interpretation of his method, he indicates that the scientist should examine only "those most akin to the others." His examples indicate, without defining what he is driving at. If one is interested in heat and observes, among other things, that the rays of the sun are hot, then one should look for heat in the rays of the other heavenly bodies, such as the moon, stars, and planets. The general class is that of rays emanating from heavenly bodies; the phenomenon of heat is found in some, is not found in others. We are to check our first observation of the hot rays by an observation of other rays, and if we find that the latter are not hot, then we have hit upon an absence of something which we originally thought we had reason to believe present. Since no one at this time really knew what heat was, there is nothing absurd in Bacon's listing and checking the occurrences of heat in the detailed manner which his book illustrates. On the contrary, though no one would any longer need to proceed in this way—for we have different conceptions of the problem itself at present—yet Bacon comes out with the conclusion that the Form of heat is motion. Whether he could have reached equally sound results by using his method in solving other problems is of course doubtful, but, in any event, his method worked well in this one case at least.

The listing of presences and absences was to be further checked by a Table of Degrees or Comparison. This is needed in those cases where the problematic "nature" varies in intensity. In solving the problem of heat, he notes that heat varies from that which is scarcely perceptible to the touch to those cases which are very hot. Therefore whatever is the cause of heat must similarly vary. If we combine this method with the two previously given, we then find that "the problem is, upon a review of the instances, all and each, to find a nature as is always present or absent with the given nature, and always increases or decreases with it; and which is, as I have said, a particular case of a more general nature" (*ed. cit.,* IV, 145). The "given nature" is apparent to the senses; in the case cited, it is the feeling of heat. The nature that is sought is that which can be generalized from the given natures. The "more general nature" is a larger class of which the discovered nature is an instance. From the metaphysical point of view, Bacon is assuming a hierarchical order of beings, some of which are more widely distributed throughout the universe, some less widely. The sensible appearances form very small classes and are linked to individual things which have a great number of other sensible appearances. Hence the first step is the collection of a large mass of instances of that sensible appearance which we are studying; the second, looking for the more general nature which need not be a sensible appearance at all—and in the case of heat is not. In this way we shall reach a knowledge of the Forms.

Since the details of the system by which Bacon attempts to illustrate his procedure in checking discovery are very numerous and since they are now mainly of antiquarian interest, we shall omit an exposition of them here. It would repay the student of the history of scientific method, however, to read them carefully, for they do exemplify the care with which Bacon worked out his plans and the astonishing ingenuity of a man who stood at the threshold of modern empirical inquiry. He himself maintained that he was a logician, not a philosopher, by which he meant that he was interested in the technique of discovery, not in a theory of metaphysics. Despite the obsolescence of his vocabulary and the almost unmanageable quantity of his classifications, despite the neglect of his teachings by most of his contemporary scientists, he was a great initiator and should be appreciated as such. None of the men who have been treated in this book up to this point were so willing to reject inherited knowledge and at the same time to elaborate so complicated a technique for replacing it. He had a clearer insight into the limited role of sensory perception than many of his more illustrious successors and he also realized to the full the need of scientific collaboration if any good was to result from the application of his technique. How deeply he felt the importance of scientific inquiry is seen clearly in the account of Solomon's House in *The New Atlantis,* where the magnificence of a court masque clothes a body of shrewd common sense. The life of the inhabitants of his Atlantis resembles that which would have been lived by men who had absorbed and put to practice the learning of Diderot's encyclopedia. For along with mathematics and other purely theoretical subjects are found all the arts, both mechanical and liberal. Whatever may have been Bacon's influence on practicing scientists, and it is said to have been very slight, his influence on the intellectuals of succeeding centuries was very great, and it is not strange that the reformers of French education in the eighteenth century put so much emphasis upon his works.

2. HOBBES

There will be some question whether it is fitting to group Thomas Hobbes (1588–1679) with philosophers usually called empiricists. But similarly we shall ourselves raise the question of how fitting it is to call even Locke and Berkeley by that name. What the empirical tradition actually was ought to appear by the end of this chapter, and since there are many similarities between the views held by Bacon, Hobbes, Locke, Berkeley, and Hume, and since their differences, as they emerge, form a dramatic story in the history of ideas, I shall urge my readers to suspend judgment for the time being and to think of the contribution of Hobbes as one act in the play whose plot will be related bit by bit.

We have, I hope, seen that Bacon's main criticism of his predecessors was their too great reliance on abstract a priori principles, on the supposed meaning of words and phrases, whereas they ought to have consulted nature itself through the kind of experimentation which he had outlined in his analysis of the causes of heat. Hobbes, too, inveighs bitterly against the Scholastics. In his chapter on "the virtues commonly called intellectual and their contrary defects" (*Leviathan,* ch. viii), where he discusses the natural and acquired virtues, he points out that sound inquiry must be limited to comparisons and contrasts and to indications of the utility of things. The objects of inquiry are natural objects, not propositions or fancies or verbal expressions. Weakness in inquiry proceeds, he maintains, from "the difference of men's complexions" together with the difference between customs and education. Men's sense organs and brains are presumably all alike and permit the epistemologist to make sound generalizations. Consequently it would seem that if true knowledge is to be overindividual it must be based on sensory experience plus rational elaboration of its contributions. The senses are "equal both in the wise and in the less wise."[4] We are then to go to the senses for knowledge which will be valid for all and not shifting in import and validity from man to man. Yet individual men suffer from a kind of madness which, among other things, induces them to verbal absurdities which they treat with great seriousness. Examples of such madmen are the Scholastics. "What is the meaning of these words, *The first cause does not necessarily*

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[4] *Human Nature,* in *Works,* Molesworth Edition, IV, 54.

inflow anything into the second, by force of the essential subordination of the second causes, by which it may help it to work? They are the translation of the title of the sixth chapter of Suarez' first book, *Of the concourse, motion, and help of God.* When men write whole volumes of such stuff, are they not mad, or intend to make others so?" (*Leviathan,* ch. viii.) Since (ch. ix) there are only two kinds of knowledge, knowledge of fact and knowledge of "the consequence of one affirmation to another," clearly there can be no real knowledge when the mind is occupied with statements which do not fall into either category. Moreover, since what he calls absolute knowledge is nothing else but sense and memory, and since rational or inferential knowledge is always conditional, it is wisest to base the latter on the findings of the former. It is conditional or rational inference which is the domain of philosophy or science. Hence if we are to be satisfied only with the absolutely incontrovertible, we should have to confine ourselves to the testimony of the senses. Such satisfaction, however, is not that sought by Hobbes. He prefers philosophical to simple sensory information and hence will attempt to derive "the perfect knowledge of the truth" from "the registers and records of things."[5]

That the basis of all knowledge is sensory experience appears again in Hobbes's more detailed treatment of reasoning and science. Reasoning for him is a kind of arithmetic, addition and subtraction. We add up similarities and subtract dissimilarities and in this manner we form the concepts from which we hope to draw conclusions. But the general terms which result from such operations have in themselves a degree of convention, for Hobbes insists that they correspond to nothing in the natural world. They are convenient signs utilized by the mind for purposes of rational computation, and though they may be subtracted from the wholes which we set up, they do not exist as separate beings. We may see a bit of matter in motion and form the idea of a moving body, but it would be absurd to think of existent bodies or of existent motion as separate from each other. It is precisely such separations made for purposes of discourse and reasoning which have led to the errors of the Schoolmen, with their *"nesses, tudes,* and *ties."* (*Lev.,* ch. viii.)

Hobbes might have found the Schoolmen less antipathetic if he had not believed with Bacon that knowledge is power.[6] "The scope of all speculation is the performing of some action, or thing to be done." Philosophy is too difficult, he says, for a man to engage in it simply for "inward glory and triumph of mind." Its purpose is the aid it gives in building up the arts, commodities of mankind, such as engineering, architecture, navigation; in short, the mechanical rather than the fine arts. When one thinks of the evils which have resulted from ignorance of philosophy, one appreciates even more fully its value. But the evils as well as the goods lie in the field of utility. Hobbes is thus clearly opposed to the valuation of truth as good in itself and of knowledge as simple contemplation of the truth. It is probably for this reason that he was so willing to consider the concept which we form for handling and organizing knowledge as conventional marks, elaborated for our own convenience. They are not natural signs, as smoke is a sign of fire, or clouds signs of rain. As marks they remind us of certain things or occurrences, and if we were not so reminded we should not be able to recall or remember the sensory experiences which are the basis of all knowledge. It follows readily that so long as these marks do their work, their appropriateness will not be questioned. But when they are substituted for that which they indicate, then absurd and vain arguments will ensue, the kind of argument which Hobbes calls madness.

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[5] *Philosophical Rudiments. Works,* II, ch. iii.

[6] *Elements of Philosophy,* ch. i, section 6.

Not only does Hobbes believe that our abstract terms are tools for thinking and thus for the manipulation of the world to our own ends, but he also agrees with Descartes that the sensory qualities, the colors, sounds, smells, and the like, are effects made upon us by causes in the nonhuman world, which causes do not resemble them. That is to say, he rejects the Scholastic theory of sensible species. Now for Hobbes all causation resides in motion, and his problem therefore is that of explaining the occurrence of sensory qualities to, or in, the human mind by means of motion. In order to do this, he must strip the world, which is the potential object of knowledge, of all properties which cannot move. That is, he must follow the lead of Galileo, and in doing so he gave impetus to the tradition which was to result in the belief that the real world is the world as described by physics.[7] Curiously enough, the dualism of mind and body, which seemed reasonable to both the Cartesians and to Hobbes's successors in England, did not seem to follow as a necessary consequence of this position as far as the formulator of the position was concerned. On the contrary, since causality was not the transfer of qualities from cause to effect but rather the transfer of motion, Hobbes felt obliged to think of the mind as a mode of motion. He fulfilled this obligation by a theory that sensation was produced in us by the impact of mobile particles of matter upon the human nervous system. Their motion was transferred to the brain and heart through the nerves where the sensory quality, called by him the *phantasm*, arises. The phantasms "are not objects," Hobbes insists, but effects in the sentient organism. Moreover, they are not what we see in vision; we see physical objects. "The object is the thing received; and it is more accurately said that we see the sun than that we see the light. For light and color, and heat and sound, and other qualities which are commonly called sensible, are not objects, but phantasms in the sentient" (*ed. cit., Elements,* Part IV, ch. xxv, 3). Lest a phantasm be thought of as a thing, Hobbes points out that it is, on the contrary, a process, but an instantaneous process. But since instantaneous processes cannot be distinguished from things, he maintains that the distinction is idle. Nevertheless, as an instantaneous process it occurs in us and not in what we are accustomed to call the external world, and though motions are material there is no duality of kind between phantasms and the motions which produce them. There is obviously a duality of existence. Such duality was of no significance to Hobbes, for he could imagine the phantasms as one end of a continuous process of motion and it was the continuity of the process, rather than the various places which events might have in it, which was of interest to him. No problem such as Descartes had to face, of interaction between two utterly different substances, arose to puzzle him.

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[7] For an admirable account of the influence of Hobbes's theory of causality, see E. A. Burtt's *The Metaphysical Foundations of Modern Science* (New York: Humanities Press, 1952), ch. v, sections A and B.

Once sensation was established by Hobbes as a form of motion, he had simply to change the rate of motion in order to explain the other psychical processes. Imagination becomes decaying motion in the absence of the object; dreams are motions occurring during sleep; the differences between the senses are explained by the differences in the sense organs; and thoughts are the organization of these decaying motions according to the rules of logic. The rules by which we think appear to present no puzzle to Hobbes. Did he think that they were simply descriptions in abstract terms of the general operations of the mind or did he take them to be conventions set up by human beings in much the same manner as human beings set up rules for their peaceful association in government? In any event he does not derive them from the laws of motion. He insists that the conceptions which we form of things derive ultimately from sensations. Thus the conceptions of color and shape come from visual sensations and they are "all the notice and knowledge the object imparteth to us of its nature by the eye" (*Human Nature,* ch. ii, section 3). But he also insists that all we can see are specific colors and specific shapes, such as *red* and *square.* These are, of course, decaying motions and "there is nothing *without us* (really) which we call an *image* or color." But the question at this point is not so much that of the "reality" of an image or a color but that of the reality or unreality of that which is named by the word "color" or "image," in other words, by conceptions or general terms. It is agreed by all interpreters of Hobbes on the basis of his own words that he is a nominalist. The general terms, or universals, ought to be residues of decaying motions. But how a set of motions which appear to us as red, green, and blue could turn into *color,* which is clearly neither red, green, blue, or any other specific color, is left in obscurity.

This obscurity becomes the more puzzling since at times Hobbes talks of the train of thought as if it moved on only in accordance with what were later to be called the laws of the association of ideas,[8] and at other times talks of it as controlled by human desires and purposes. It is true that such desires and purposes arise within us, as he describes them, almost as if we had nothing to do with their origin. But since he also, when writing of speech and reasoning, emphasizes our active part in inventing terms and performing operations for our own uses, one finds in him reasons for believing both that he thought we were in control of our mental operations and were not. If he were to maintain that all our thinking was determined by motions, which in turn were describable in terms of dynamics, then it seems impossible to explain how men could ever err. And if he were to maintain that our thoughts were given a logical structure by us and not by the laws of dynamics, then it would seem improbable that we should ever hit upon truth except by accident. Hobbes happens to be more impressed by the errors of thinking than by the truths, and since he also seems at times to wonder how men ever do reach correct solutions of their problems, he proposes in a curious passage in the *Leviathan* (ch. v) that an arbitrator or judge be set up to decide what opinions are right and what wrong. This is scarcely a proclamation of the invincibility of the Truth. But when one remembers that the end of knowledge is power, then one sees immediately that the glimpse of possible power may blind a man to the frailties of his arguments and that more than pure logic is needed to settle cognitive disputes. If Christ had revealed the truth to us in matters of reasoning, all might be well. But He has not. And, consequently, "men's reasonings are sometimes right, sometimes wrong; and consequently, that which is concluded and held for a truth, is sometimes truth, sometimes error. Now errors, even about these philosophical points, do sometimes public hurt, and give occasions of great seditions and injuries. It is needful therefore, as oft as a controversy ariseth in these matters contrary to public good and common peace, that there be somebody to judge of the reasoning, that is to say, whether that which is inferred, be rightly inferred or not; that so the controversy may be ended. But there are no rules given by Christ to this purpose, neither came He into the world to teach *logic.* It remains therefore that the judges of such controversies, be the same with those whom God by nature had instituted before, namely, those who in each city are constituted by the sovereign." (*Ed. cit., Philosophical Rudiments,* II, 268.) The reason, then, why a civil authority decides questions of truth and falsity is that all thinking has civic implications. The authority in question will decide in favor of the answer which is in the best interests of the city. Hobbes uses the example of a woman who bears a misformed child. Should it be killed? The law forbids the killing of a man. Is the monster a man? "No man doubts but the city shall judge it, and that without taking an account of Aristotle's definition, that man is a rational creature." As an historical interpretation of certain forms of pragmatism, this point is of historical interest and in view of recent developments of Marxism and, before that, of fascism, it is of double interest. In all such cases the pragmatic value of a rational conclusion is at stake. In all it is assumed that however remote an idea may be from political or ethical applications, it nevertheless has them ultimately. But if a man believes that a statement can be judged true or false exclusively on the basis of evidence and of logic, then such arguments seem not only wicked but also irrelevant.[9]

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[8] See *Leviathan,* ch. iii; and *Human Nature,* ch. iv, section 2.

In the *De corpore politico* (Part II, ch. x, sec. 8) Hobbes is specially clear about his belief that right reason in a state of nature is an individual performance with no objective standard by which it may be judged. He is emphatic in declaring that right reason does not exist *in rerum natura,* but varies from man to man. We have come a long way from the sensory empiricism of Telesio, from the experimentalism of Bacon, and from the Cartesian intuitionism. In Hobbes's view there is no overindividual standard to which appeal may be made, and consequently a conventional standard must be erected. That the standard is the decision of civil authority is decided, as we have said, because all ideas have social consequences. If, however, the social consequences can only be deduced by logic and if the decision of whatever judge there be must be made in anticipation of them, clearly we are in the situation where consequences are first determined by reasoning and yet truth and falsity are determined by utilitarian considerations. This sounds more paradoxical than it is when we thoroughly understand what Hobbes means by "truth." He does not say that the judge's decision is truer than that of the individuals concerned in the sense that his reasoning exists *in rerum natura* and that theirs do not. But since truth can actually vary from individual to individual, and since the conflict in truths is undesirable, the judge's truth is to be accepted for the sake of political peace. The individual in isolation is not bound to reach truth; for he may reason from insufficient premises or commit logical fallacies or may talk in absurdities. In the first case, since he cannot on each occasion go back to the primordial axioms, he may utilize a premise which is ill-founded and yet not know it to be so; in the second, he may be reasoning about the cause or effect of some particular event, and guess wrong; in the third, he may argue from general terms and reach a false conclusion which, instead of being called an error, should be called "senseless speech." How much confidence Hobbes had in what we ourselves would call the correctness of the judge's decisions can no longer be determined. For our purposes we have but to note that he believed that each man would probably reach deductive conclusions which would contradict those of his fellows, much as some writers today believe that in aesthetic and moral matters agreement, if left to unguided "taste," would never be attained.

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[9] The whole matter of Hobbes's conventionalism and its consequences has been admirably studied in a doctoral dissertation by Raymond E. Olson, *Hobbes' Logical Conventionalism,* in manuscript in the Johns Hopkins Library.

The confusion and intellectual anarchy of man in a state of nature was paralleled by man's moral anarchy. Each man, like Machiavelli's Prince, believes his desires to be self-justified. The mere fact that he wants something is proof that it is good. And since no man is so endowed with brotherly love that he will willingly share his goods with another, the conflict of desires inevitably produces a state of war. But among our natural desires are those for the esteem of our fellows and for self-preservation, and these are precisely those desires which are most likely to be frustrated by the presence of other men. For if I have something which is wanted by my neighbor and if his want of it determines his belief that he should have it, what will prevent his seeking to obtain it? And again, if I feel myself justified in wanting this, that, or the other which may belong to someone else, then I am disturbed by his lack of respect for my desires, and my disturbance will express itself in violent form. The social atoms then are in a state of ebullition, colliding and rebounding, and this is the state of war. Since Hobbes's own description of this state cannot be improved upon and since it is one of the most famous prose passages in English, we quote it here in full.

> Whatsoever therefore is consequent to a time of war where every man is enemy to every man; the same is consequent to the time, wherein men live without other security, than what their own strength, and their own invention shall furnish them withal. In such condition, there is no place for industry; because the fruit thereof is uncertain: and consequently no culture of the earth; no navigation, nor use of the commodities that may be imported by sea; no commodious building; no instruments of moving, and removing, such things as require much force; no knowledge of the face of the earth; no account of time; no arts; no letters; no society; and which is worst of all, continual fear, and danger of violent death; and the life of man, solitary, poor, nasty, brutish, and short. (*Lev.*, ch. xiii.)[10]

This passage is clear proof, if any is needed, that Hobbes is far from being a cultural primitivist. The absence of arts and letters, of international trade, of agriculture, navigation, and engineering is not equivalent in his eyes to a happy pastoral or even prepastoral condition. The acorn-eating savages of Juvenal had no charms for him. He takes it for granted that his readers will agree that civilization is something to be prized. At the same time he realizes that the state of nature is not in itself either good or bad; goodness and badness enter the scene with law, and law is invented to bring peace into the conglomerate mass of human beings who make up a society. It is peace which is most highly esteemed by Hobbes, for peace alone is the unique condition of producing those satisfactions which he believes to be most worthy of human beings. He knows well enough that some things, usually called sins, are not violations of any law, for instance, covetousness. His religious convictions led him to make this distinction between sin and crime, but the distinction did not arise within his own system. There man's passions were uppermost as causes of action, and in a state of nature there would be no way of judging a desire to be sinful. It was also in the English tradition for civil authorities to condemn acts alone, not thoughts, intentions, and desires. As a matter of fact there are passages in the *Philosophical Rudiments* (ch. xiv, sec. 19) which flatly state that where there is no law there is no sin and where he feels the need to apologize for not making atheism a sin, since it is merely the result of folly. When the atheist takes action against God, then, if the worship of God is established by law, he might be guilty of some crime. But so long as the fool says in his heart that there is no God and keeps the saying in his heart, he is simply a fool, not a criminal.

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[10] Cf. *Philosophical Rudiments,* ch. i, section 12 (Molesworth ed., II, 11). See his passage on the American Indian, in *Leviathan,* following the passage quoted.

The state of nature, then, of the war of all against all, is a condition in which ethical judgments are irrelevant. That people living in that state might not find it so unpleasant as it appeared to Hobbes is suggested by his passage on the American Indians who, he says, live in this brutish manner, seem satisfied with it; and if satisfaction is any test of goodness then one ought to declare their society as good as any. But Hobbes's common sense and unquestioned preference for civilization lead him to assert the necessity of some instrument which will pacify the brutish inclinations of men and bring order into the motions of the social atoms. That power is law and is dependent upon the will of the Prince. In this area of human affairs it would seem as if the will of the Prince was as omnicompetent as it was to Machiavelli. But it will be recalled that even Machiavelli realized that the power of the Prince was limited by the consent of the people—not that their consent is of any value in itself but that it is easier to rule when one has it. Such restraint in Hobbes is found in natural law. Natural law, discovered by the reason, is simply the rule "by which a man is forbidden to do that, which is destructive of his life, or taketh away the means of preserving the same; and to omit that, by which he thinketh it may be best preserved" (*Lev.,* ch. xiv). It is not to be confused with natural right which "is the liberty each man hath, to use his own power, as he will himself, for the preservation of . . . his own life; and consequently, of doing anything, which in his own judgment, and reason, he shall conceive to be the aptest means thereunto." Law, whether natural or statutory, is a restriction of our liberties. A man has a natural right to live as he will but is bound by natural law not to commit suicide. He has a right then not to live if he finds life intolerable, but since he must obey the law, he cannot benefit from that right. When laws are removed, says Hobbes (*Philosophical Rudiments,* ch. xiv, sec. 3), our liberty is absolute. Natural and divine laws limit it and the limitations which they put upon it are increased by those imposed by civil law and local municipal laws. Thus very little is left of our natural right, once we leave a state of nature.

The law of nature which thus restricts our liberties follows from the reasoning based upon the absurdity of primordial warfare. When there is a war of all against all, one is not even sure of satisfying his natural right: that to life. For in such a state of affairs, a man is not restrained from killing his neighbor if he can satisfy his desires only by doing so and similarly his neighbor can kill him.

Consequently the first statement of natural law is that every man ought to seek peace. Yet when peace does not prevail, we relapse into a state of nature and have the right to protect ourselves. Since such a state is intolerable, a second law of nature follows: that with the agreement of others, we should be satisfied with as much liberty as we are willing to grant to others. This law is interpreted by Hobbes as identical with the Gospel commandment: "Whatsoever you require that others should do to you, that do ye to them." We accept this rule voluntarily and in doing so transfer part of our natural right to a power above us. That power becomes the sovereign, and when he is empowered to administer the law, he is also given the power to use the means of doing so. He can therefore tax his subjects to maintain an army and to appoint magistrates for the administration of justice. Once this power has been transferred and the restrictions upon one's personal rights accepted, there is no way of regaining it. Yet there is a fraction of our natural right which can never be transferred: the right to self-defense and the right not to accuse oneself. One cannot agree to nonresistance to violence. Even the prisoner condemned to death has to be escorted to the scaffold by armed guards. As for self-accusation, "in the civil state, the accusation is followed by punishment; which being force, a man is not obliged not to resist." Self-preservation cannot be rejected, though sometimes the state has to deprive a man of his life. Therefore when a man is forced, as under torture, to accuse himself and thus to run the risk of death, his testimony is worthless. It is worth noting that we have here the principle of the Fifth Amendment to the United States Constitution explicitly justified for theoretical reasons.

To these two laws of nature there is to be added a third: that men must carry out their contracts. This is justified by the observation that, if it were violated, we should relapse into a state of war. Lest one think that this applies to Princes, Hobbes points out in some detail why Princes are not bound by contract. Sovereignty is indeed granted through agreement, but once it is granted, it cannot be withdrawn. In the first place, the original agreement binds the members of a state to obey the sovereign, and one party to an agreement cannot break it without the consent of the other. If it be charged that the Prince has broken his part of the contract, who is there to determine the truth of the charge? He may abdicate; he may lose a war and be dethroned by the conqueror; he may die without leaving an heir. But none of these contingencies is of the nature of revolution. They free men from obedience to their Prince for the simple reason that in all such cases their Prince has either died or been killed or voluntarily given up his power. But the subjects, of their own volition, cannot either kill or dethrone or otherwise rid themselves of their rulers without violating this law. The Prince has not, moreover, reached his position of sovereignty by any agreement to which he is party. One man cannot make a contract with a multitude. He represents that multitude, personifies their wishes, sometimes inherits his position. He is not a person among other persons, a subject among other subjects, but an individual to whom all have given the power of protecting them and administering justice. The subjects are bound by their covenants with their fellows to obey him; he is bound by nothing but the laws of nature and his own good sense. As a matter of fact, says Hobbes,[11] the Prince cannot be unjust or injurious, since there is no law to determine the injustice of his act, though he may, of course, be sinful in the eyes of God. But sin cannot be punished by men.

As one reads this portion of the *Leviathan,* one sees clearly enough the political allegiance of its author. For he continues to argue that since a Prince cannot be judged by his subjects, for the reasons given, so he cannot be put to death or otherwise punished. When Hobbes argues that his acts are in reality committed by his subjects, in that the subjects have agreed to the consequences of their relinquishment of sovereignty, he is too metaphysical. But when he argues that the Prince has as his task the preservation of the peace and the defense of his subjects and that therefore he has the right to the means for performing that task, he is, it would seem, on firmer ground. He alone is able to determine what means are right and what wrong and for that matter what opinions should be published and what not. Hobbes has little patience with any ideas of limiting sovereignty by laws other than those of nature. Even the division of powers in England between the king and the two houses of Parliament is repugnant to him. Though he admits that Princes can be sinful, he can think of no way of improving them lawfully. He has too low an opinion of human nature to imagine that multiple sovereignty would do any better than personal sovereignty. And though a prince will be ruled by the same passions and reasons as other people, yet he will understand that his personal interests are best served when the public interest is best served. Observations of this type bring Hobbes even closer to Machiavelli than his basic theory does.

Nothing much would be gained by relating here all the fifteen laws of nature, for Hobbes maintains that they all derive ultimately from the Golden Rule. Once that rule is understood everything else follows and no man will believe himself to weigh more in the scales of justice than another. He will weigh, however, as much; nor is Hobbes preaching a life of self-sacrifice. The laws of nature were decreed by God and hence are eternally binding. It is odd that God should not also have decreed a set of circumstances in which they could be obeyed without internecine war. A natural society, instead of an artificial one, might have been instituted by God, and indeed the Jews and the Massachusetts Bay colonists did believe that to be so. But Hobbes had been through a period in which he saw his fellow countrymen engaged in rebellion and regicide and the results seemed to him to be far worse than the conditions which they had thought to improve. The *Leviathan,* published in 1651, ten years after the Grand Remonstrance and two after the beheading of Charles I, can best be understood against that background of rebellion and regicide. It was written as if Hobbes had asked himself what was the need of force within the state and found the answer in man's natural hostility to man. Once the basic principle of his political philosophy is grasped, the rest follows logically enough. The fundamental question which he might have raised was why men in a state of nature should have found it intolerable. But philosophers seldom do ask those questions which might prove embarrassing to their systems and seem to avoid them by a kind of unconscious self-defense. The point, though logically important, has no literary importance, for probably everyone would have been willing to grant natural man the same likings and dislikings which he himself had. Hobbes would have thoroughly loathed the disorder of the state of nature, the lack of arts and sciences, and hence he attributed his feelings to primitive man. Since primitive man was only a logical device, his feelings were perhaps of little interest and the main job was to reconstruct society intellectually on the theoretical foundations which the savage's nature would grant.

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[11] *Lev.,* ch. xviii; *Philosophical Rudiments,* ch. vii, section 14; *De corpore politico,* Part II, ch. ii, section 2.

There remains a question about Hobbes which demands at least brief discussion if only because of the different ways in which it has been answered. That question is whether Hobbes was a materialist. Obviously this will depend on what that term means. But if it means a believer in the exclusive existence of matter, then he was clearly not a materialist. For he believed in the power of ideas and the passions to cause effects in the external world; he believed in the existence of God as an immaterial being; and he believed in the ineradicable difference between what he called the "power motive" of the mind and the "power motive" of the body. "That power of the *mind,*" he says *(Human Nature,* ch. vi, sec. 9), "which we call *motive,* differeth from the power *motive* of the body; for the power *motive* of the body is that by which it *moveth* other bodies, and we call *strength;* but the power motive of the *mind,* is that by which the mind giveth *animal motion* to that body wherein it existeth; the acts hereof are our *affections* and *passions.*" I am not saying that he merely sustained the thesis that there was existential duality between the mind and the body, but that the mind was not material in the sense that bodies were material. That can be demonstrated by the laws which describe the operations of the mind, which laws could not be applied to the motion of bodies. The fact that ideas were decaying motions does not imply the belief that they were material objects, though when Hobbes is describing their origin he talks as if they were, since he says that they are instantaneous processes. He is certainly not an epistemological monist: that appears clearly in the passage cited on p. 174 above. Psychophysical monism did not arise in England until a later period when Berkeley and Arthur Collier denied the existence of matter. In its materialistic form it is, roughly speaking, a nineteenth-century doctrine, though philosophers such as La Mettrie and Holbach anticipated it.

As we suggested at the opening of this section, the kind of empiricism which Hobbes preached was none too clear. Though he believed that all ideas had their origin in sensation, he also was passionately devoted to mathematics and might even be said to have employed the geometrical method. He never solved the problem of how mathematical knowledge could arise from perception, for though he said that reasoning was simply addition and subtraction, the techniques of those operations are not sensory. Moreover, in his political philosophy he was more formal than empirical, for the very foundations of his political ideas were a priori. He made whatever assumptions were necessary for explaining the fact of observation. Thus he could observe prisoners going to the scaffold accompanied by armed guards; he assumed that this was because of an implicit recognition of their natural right to save their lives by escaping if they could. He observed that people locked their doors at night; he assumed that this was because of residues of their primitive bellicose feelings, feelings which they also attributed to their fellows. His very desire for formal systematizing could hardly have arisen from perceptual knowledge, which is not formal in its appearance but disorganized and inherently heterogeneous. He laid the foundations for that philosophy which is usually called empirical, but the term is a misnomer if interpreted strictly. He does get his problems from experience but scarcely his method and answers. Those he gets from tradition.

3. LOCKE

The authority of experimentation corrected and guided by reason and the authority of reason corroborated by experience were established on fairly strong foundations by Bacon and Hobbes. Hobbes was more given to rationalistic deductions than was his great predecessor and more willing to look for some one underlying mode of existence by means of which he might be able to explain all others. This mode he found in the motion of corporeal particles and, as it will be recalled, only such motion could be productive of real change. It produced all sensations which in their varying degrees of decay turned into ideas. But it could not produce the rules by which we reasoned about motions, and neither Hobbes nor Bacon attempted to deduce the rational categories from modes of motion. They retained the duality between ideas and that to which ideas refer, and they also retained the duality of mind and body. Bacon was, to be sure, mainly interested in scientific discovery and not in epistemology as that term was interpreted in the eighteenth and nineteenth centuries. Hobbes was indeed interested in epistemology but was apparently satisfied when he demonstrated that all ideas arose from sensation. He did little if anything to draw the frontiers of possible knowledge and raised no fundamental problem of truth and verification. Though it is always dangerous, if not downright misleading, to arrange philosophers in logical order, it is reasonable to see in one of Locke's major works, *An Essay Concerning Human Understanding,* inferences which might have followed from a study of Hobbes and Descartes. John Locke (1632–1704) for some reason or other was not too generous in attributing his ideas to others. There is a minimum of proper names to be found in the indexes to his works. Yet we can be sure that he knew Hobbes and Descartes and it is hardly to be supposed that his investigations had not been prompted by their conclusions. The similarity between his views and those of Descartes are too close to be coincidental, even though his infrequent references to the French philosopher are by way of criticism.

One outstanding difference between Locke and Hobbes, as far as the theory of knowledge is concerned, is that Locke expressly denies any interest in "the physical considerations of the mind." He was not to trouble himself "to examine wherein its essence consists; or by what motions of our spirits or alterations of our bodies we have come to have any *sensation* by our organs, or any *ideas* in our understandings; and whether those ideas do in their formation, any or all of them, depend on matter or not." [12] He is thus faithful to his title. He is studying the understanding as it already exists and assumes its existence as a datum. We have a set of ideas about which we discourse and argue. How true are they capable of being? How far can we verify them? When do we pass from certainty to greater or less degrees of probability? Clearly, insofar as he limits himself to such questions, he need have no concern for such metaphysical problems as the universality of mind or matter, though ideas about such questions could legitimately be analyzed and appraised. Yet he also is convinced before he opens his argument that we have some knowledge which is good enough for practical purposes, "for the conveniences of life and information of virtue" (*ed. cit., Intro.,* 5), a point of view very similar to that of his predecessors. Just what conditions determine satisfactory practical knowledge troubled none of them. Why some knowledge, ill-founded or founded on bases of which we might be ignorant, could nevertheless be useful is a question which does not appear to have risen in their minds. They accepted as a datum the convenience of some of our information and let it go at that. The purpose of the *Essay* was then "not to know all things, but those which concern our conduct" (*ed. cit., Intro.,* 6).

Knowledge viewed in that light is a set of ideas and, when we think, we think about ideas. The word itself, which has become one of the most ambiguous in the philosophical lexicon, stands in the *Essay* for whatever the mind thinks about. "I have used it," says Locke (*ed. cit., Intro.,* 8), "to express whatever is meant by *phantasm, notion, species,* or *whatever it is which the mind can be employed about in thinking.*" It is the most general term to name the subject matter of the understanding. And since Locke assumed the duality between the mind and that which it knows, the first question which arose was that of how ideas, whatever they might be, come into the mind. A mind empty of ideas might seem to be a contradiction in terms. But the paradox could not have seemed to be one at a time when the mind had not as yet been identified with its "contents." Just as Descartes did not doubt the necessity of an agent of thinking, something which did the thinking, so Locke has no doubts about the existence of a receptacle in which ideas may be placed as their natural locus. His famous statement about the mind being like white paper on which nothing is written (*ed. cit.,* Bk. II, ch. i, 2) at the time of one's birth, is a frank admission of his belief in the mind as a separate entity. But it is not simply a receptacle of ideas; it organizes, analyzes, compounds, compares, and contrasts ideas. It is therefore an active subject and not simply something composed of the experiences which it suffers as it goes through life, like a mosaic of which the tesserae are colors, sounds, smells, and other sensory data. This point is important, for later on the very existence of a perceiving mind came to be doubted. Locke's position is harmonious with the general dualistic position, a position which was accepted, probably as self-evident, until the days of Hume.

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[12] *An Essay Concerning Human Understanding,* Intro., par. 2. I quote from the Fraser edition.

That Locke begins with an attempt to disprove the existence of innate speculative and practical principles is attributable to the arguments advanced by the English Platonists to prove their existence. We shall trace the history of the idea of innate ideas in the chapter which follows this, but it will be useful here to anticipate the argument briefly in order to indicate Locke's target. Whether he was thinking mainly of Descartes or of Lord Herbert of Cherbury, there is no way of knowing now, though judging from the type of disproof which he uses, it seems more likely that it was the latter rather than the former. Lord Herbert had maintained that the mind in thinking inevitably followed certain rules which when put into words were the Laws of Thought, the Laws of Contradiction, of Identity, and, one might add with equal justification, the Law of Excluded Middle. These laws not only control our thinking, when we think correctly, but by their very nature cannot be based upon empirical foundations, since, as Kant was to argue later on, they are the very laws by which we make experience intelligible. As for the innate practical principles, these are moral laws which define goodness and evil.[13] The position of the English Platonists was, roughly, that such principles, whether speculative or practical, were prior to experience, recognized by all men, and by the very nature of their universality and eternality could not be empirical in origin.

Locke's attack on innate ideas is directed to their universality. For him a universal idea ought to be found in all minds, civilized or savage, young or old, sane or insane. But it was a travesty of Platonism to maintain that an innate principle had to be conscious to all minds, since a mind might operate in accordance with psychological laws of which it was not aware. A child may reason correctly without studying logic, as the Egyptians used inclined planes before the days of Archimedes, and the Babylonians solved geometrical theorems before the codification of geometry by Euclid. Savages observe the rules of their peculiar languages without any codified grammar and all of us have some sort of ethical training long before we study ethics. Moreover, the universality of which the Platonists were talking was the universality of principles and ideas, the kind of universality which Platonic ideas were believed to have. Experience, as their ancient master had taught them, might provide examples of universal traits but not universality itself. It is one thing to see bits of red, another to form the general ideas of redness. And so with the other universal and eternal principles. We become aware of how we think by thinking, and some of us may never achieve that state of awareness. Nevertheless the Platonists themselves did use general assent to prove that some ideas were innate, especially when they were talking about moral and theological principles. It would have been a bad argument, even if Locke had not pointed out its falsity, because general assent to an idea does not prove its priority to experience, and that is what required proof. I find no instance of an English Platonist's saying that a baby's first words are, "Things equal to the same thing are equal to each other," and even if they were, the pronunciamento would not establish the innateness of the axiom. It is a singular weakness of Locke's mind that he did not see this.

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[13] Details will be given in Chapter 7.

He did, however, perform a most valuable service by pointing out that there is no general agreement on such matters. The homogeneity of the human mind is something which even today, after so many years of discussion, is still asserted for purposes of establishing universal and eternal principles of truth, goodness, and beauty. Locke, it is true, made little use of his argument beyond his attacks on the theory of innate ideas, but the fact that he wrote eloquent passages on the diversity of, for instance, moral judgments called attention to human differences of opinion and should have dissuaded people from vain attempts to harmonize or reconcile them. But it goes perhaps without saying that until recent times few if any scholars were interested in particularities of human culture, preferring to spend their time in constructing generalities.

Instead of having recourse to innate ideas, Locke turned to "bare intuition" as the instrument by which we discovered those truths which were indubitable. This would appear to be identical with the natural light or with Spinoza's intuitive insight. That there are certain ideas which we cannot doubt and which are seen immediately to be indubitable appears, however, in the fourth book of the *Essay,* not in the first. In this later portion of his work, Locke gives as instances of intuitive knowledge the difference between black and white, between a circle and a triangle, and the mathematical assertion that "*three* are more than *two* and equal to *one and two*" (*ed. cit.,* Bk. IV, ch. ii, 1). No mediating ideas are needed for perceiving such truths. They are grasped at first sight and are the clearest and most certain "that human frailty is capable of." Moreover, intuition of this sort is the source of all the certainty and evidence of all our knowledge. Locke himself did not believe this to be the kind of knowledge which we have of the external world, and as we shall, it is hoped, see, most knowledge for Locke was nonempirical. The difference between black and white or the equality of a number and the sum of its parts is not given to us at birth, for until we have experience of colors we obviously cannot distinguish between them, and until we know what numbers are and that we can add them to form larger numbers we cannot see that a finite whole is equal to the sum of its parts. But the seeing, the intuition, is a function which, even in Locke's theory of knowledge, is potentially present and, as a function of knowing, was just as innate as any speculative principle which the Platonists were maintaining to be innate. Indeed, ironically enough, Locke himself reduced such knowledge to the Law of Contradiction in the fourth book of the *Essay* (*ed. cit.,* ch. vii, 19) and says in so many words that no demonstration is needed to prove it. What is more, he maintains, like a good Kantian, that an intuition of such principles will tell us nothing whatsoever about the world beyond the mind (*ibid.,* 14) nor even that there is anything beyond the mind. Such information must come from sensory experience. No more proof is needed that Locke, like Hobbes, believed that the operations of the mind were independent of perceptions and were used by us to reason about the perceptual world, or, if one prefer, about the objects of knowledge.

It must be admitted that the twenty years spent in the composition of the *Essay* must have caused Locke to forget some of the things which he had forcefully asserted in the earlier parts of his book. For when he is trying to refute the doctrine of innate ideas (e.g., *ed. cit.,* Bk. I, ch. i, 12) he does not mention intuitive knowledge at all, to say nothing of correlating it with such speculative principles as the Laws of Thought. He refuses to admit that the operations called reasoning, which can only follow these laws if they are to be valid, are properly called innate, though they certainly are not said by him to be acquired. But, as Leibniz was to point out, all that is meant by their being innate is that they exist as inclinations, dispositions, habits, "or natural virtualities," not overtly present to our consciousness. And as Locke, even in the first book of the *Essay,* pointed out that the materials which entered the mind from the external world required elaboration before they could be used for cognitive purposes, it is at least strange that he did not discuss the processes of this elaboration early in his treatise. On the other hand, it must not be forgotten that he did discuss it before the book was completed and that his epistemology was not a theory according to which all knowledge, that is, the subject matter as well as the technique of handling it, arose in sensation. In fact, he says himself that such general principles as the law of contradiction will be dealt with later in the *Essay* (*ed. cit.,* Bk. I, ch. i, 16), so that the really strange item is the ignorance of commentators and historians.

That Locke maintained that the best proof of innate ideas was to be found in universal assent and that he discovered no universal assent to any ideas supposed to be innate is generally understood. Omitting children and idiots from the argument, it would be queer if all adults did not manifest a knowledge of those speculative and moral principles which are inevitably present in the adult mind. For some of the innate ideas were assertions presumably of fact, and not simply procedural rules for reaching consistent conclusions from accepted premises. The speculative principles "carry their own evidence with them." But "moral principles require reasoning and discourse, and some exercise of the mind, to discover the certainty of their truth" (*ed. cit.,* Bk. I, ch. ii, 1). Therefore if any were innate, it would appear reasonable to believe that all men would agree about them. Locke is willing to admit that all men desire happiness and have an aversion to misery (*ed. cit.,* Bk. I, ch. ii, 3), but these appetites are far from being statements of fact, assertions, or ideas. What is wanted is something like an idea of justice which all men would actually be conscious of. But there is no such idea. Even the desire for happiness is satisfied in such a variety of ways, each man having his own idea of the nature of happiness, that one cannot even lay down the principle of hedonism as a universally accepted idea. This does not entail for Locke the conclusion that there are not rational principles. On the contrary, he is firm in the belief that the truth of moral rules can be demonstrated with all the certainty of logic. But the very fact that they require demonstration is proof to him that they are not innate.

If we look upon the actual moral beliefs of men, we see a variety of practices justified in a variety of ways. Justice, piety, gratitude, equity, and chastity, so honored in Christian countries by precept if not by practice, are ignored by others. It is not merely that such men are unjust, impious, ungrateful, and so on, but that they do not know the meaning of the terms. Each society has its own rules and the rules are contrary to ours. Locke is unwilling to land in complete ethical relativism; he believes that some societies are downright wrong. But since he is concerned with the innateness of moral principles and maintains that innate ideas ought to be found in all minds, he emphasizes the variations in moral precepts rather than making an attempt to harmonize them. It is important to insist upon this, for he actually believes in a moral law, the law of nature, which is revealed to man by God. But it simply happens that some men are not aware of it. So, one might argue, there are certain laws of hygiene which are good for all men, though some men violate them. The law which is revealed may be violated in the same way as civil law may be violated. It does not compel us to be obedient; we give assent to it freely. Consequently it would be a falsification of his doctrine to present it as a theory maintaining that all laws of morality are equally sound. He grants freely that the laws which Lord Herbert, his most eminent opponent, believes to be innate are in fact true laws. But he is interested in pointing out that they are not accepted by all men, as they ought to be if innate.

If no ideas are innate, then they all must be acquired, and the second book of the *Essay* is an attempt to show how they are acquired. But here he is speaking of ideas as the data of consciousness, not as assertions which might be true or false. His examples are *hardness, sweetness, thinking, motion, man, elephant, army, drunkenness;* not, *Metals are hard, Sugar is sweet, Pope Joan was a man, The elephant is a mammal.* The latter are judgments, statements, propositions, sets of words which may or may not be true. That the apprehension of hardness or of sweetness is knowledge in the same sense in which "metals are hard" is knowledge is surely open to discussion, and he reserves his outline of the way in which we make such judgments for the last part of his work. In beginning with ideas in this peculiar sense of sensory apprehensions, he is following a tradition which went back to Democritus and which was to land him in a situation from which his successors were to demonstrate the impossibility of knowing directly any external reality. For if our judgments are made only about our ideas, then the problem of verifying them through their supposed correspondence with the external world becomes impossible of rational solution. Common sense, what Santayana called animal faith, may be invoked, but by definition neither is rational.

The magic word "experience" is introduced by Locke to name the source of all our ideas. Experience is divided into two parts, that which is external and that which is internal. All ideas then come from either sensation or introspection. The presupposition of a split between the inner and the outer worlds is not in essence a split between mind and matter—psychophysical dualism—but rather a split between public and private knowledge. Nothing is said about the difference between mental and material objects;

Locke is talking about ideas. The duality between ideas and their sources is found within the mind as well as in the relation between the mind and its objects. Thus whether one has an internal or an external idea, the idea is to be distinguished from that of which it is the idea. But since Locke also believed in a duality of mind and matter, he is a double sort of dualist, an epistemological as well as a psychophysical dualist.[14] The importance of noting his dualism appears when one considers the question of the relation of our ideas to that of which they are the ideas and the second question of the verification of knowledge in the sense of judgments.

It is common knowledge that Locke distinguishes between simple and complex ideas, both those of sensation and those of reflection. This distinction is so elementary that it requires nothing in the way of exposition, a simple idea being, for instance, one of *redness* or *sweetness*, a complex one of a *red square* or a *sweet apple*. What is more important is the relation of ideas to their objects, for here Locke arrives at a simplification of the world's qualities which had been previously made by Descartes and Galileo, and which apparently had first been made by Democritus in his famous fragment: "By convention there is sweet; by convention, bitter . . . but in truth there exist atoms and the void." [15] This operation is performed by distinguishing between the ideas of secondary qualities and those of primary qualities. All ideas are perceived in the mind itself and all are caused by some quality in objects which produces the ideas in us. The primary qualities are "utterly inseparable from the body, in whatsoever state it be"; they are solidity, extension, motion or rest, number, and figure. These are arrived at by a curious process of reflection, which consists in asking us to imagine a body without them. In other words, they define matter for us in terms which are sufficient and necessary for the construction of Galilean dynamics. Once it is accepted that physics describes the external world, and that the external world has only those properties which are needed by physics, then what Whitehead called the bifurcation of nature has been made. The whole inner life, not merely that of dreams and fantasies, but that of sensory properties becomes "unreal." And though Berkeley and others of Platonistic leanings were able to give to their own satisfaction idealistic interpretations of the primary qualities, the Lockean tradition persisted as the standard tradition of common sense.

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[14] The distinction between the two kinds of dualisms was emphasized by A. O. Lovejoy in his *The Revolt Against Dualism* (New York: W. W. Norton Co., Inc., 1930). One may believe that nothing exists but matter or mind and yet be an epistemological dualist, for one could assert the duality between ideas and their objects and also believe them both to be material or mental beings. One would then have an existential, but not a qualitative, duality.

[15] Sextus Empiricus, *Adv. Math.*, VII, 135.

That the secondary qualities are produced in us by the primary, is simply stated at the outset as if it were either self-evident or an assumption. Yet what reason is there to think that the secondary qualities are less external than the primary? We can, to be sure, imagine bodies with various colors, giving off various sounds, emitting various odors, and having various tastes, but similarly we can imagine the primary qualities to vary to such a degree that they are insensible. They, like the secondary, vary with the observer, and Locke must have known this, though nothing was made of it until the time of Berkeley and Arthur Collier. Yet he maintains rigidly that the ideas of the primary qualities resemble those qualities themselves, whereas the ideas of the secondary qualities "have no resemblance of them at all" (*ed. cit., Essay,* Bk. II, ch. viii, 15). They are purely mental with presumably mental objects and ought indeed to be classified with the ideas of reflection, one might think. The only argument which he advances for the subjectivity of the secondary qualities is the common-sense one that a fire nearby will cause pain, and at a distance warmth; that it is the same fire and, one supposes, it should, in order to be a real thing in the material world, always have the same qualities. But in both cases it is an observed fire and all that we know about it, according to Locke himself, comes from our ideas of it. If the ideas vary with distance, then fire varies with distance and it would seem more reasonable to conclude that an object's qualities all vary with its relation to an observer. What Locke's arguments reduce to is the assumption that there must be an external material world; that it must have as few qualities as possible—according to the Principle of Parsimony; that the only necessary qualities are those needed for physics. Just how the physical objects produce either their duplicates in our world of ideas, to say nothing of how they produce the secondary qualities, is left obscure. The appeal is always to common consent: "This everybody is ready to agree to." But in the long run most people also are ready to agree to the external existence of the secondary qualities. What was needed was a finer analysis of the idea of an object, an idea which Locke seems to have taken over uncritically from common sense as an entity that had a kind of self-identity throughout time and could move freely in space. The Laws of Identity and of Contradiction could be applied to it as if it were a term in an argument, so that one could maintain that at a variety of times it would have the same properties and that its properties would not change with either velocity or position. But it was surprising to find a man believing in this and also believing that all knowledge came from experience.[16]

Besides the primary and secondary qualities, there are powers. Powers are the capacity which objects have of causing change. The powers arise from "the particular constitution of a body's primary qualities"; they "make such a change in the bulk, figure, texture, and motion of *another body,* as to make it operate on our senses differently from what it did before. Thus the sun has the power to make wax white, the fire to make lead fluid" (*ed. cit., Essay,* Bk. II, ch. viii, 23). But again, if we are to rely on our ideas of events, all we can observe is that wax turns white when heated and that lead melts. Nothing is gained by introducing the idea of a power, and indeed Locke is here simply paying his tribute to tradition, for he is quick to point out that the powers are simply the names for what the primary qualities of an object can do under certain circumstances. He sees clearly that the reason why we do not attribute the effects to the objects which produce them is that we can observe both the object and its effects; we can actually see the sun which blanches the wax and the wax itself and thus know by inspection that the sun is not blanched. But in the case of the secondary qualities we do not observe the object stripped of them and producing them, "nor can reason show how bodies *by their bulk, figure, and motion,* should produce in the mind the ideas of blue or yellow, etc." (*ed. cit., Essay,* Bk. II, ch. viii, 25). Here then both reason and observation are contrary to what we should conclude and yet Locke concludes to it. Surely he might have been expected to be a bit less cavalier in tossing out what evidence he had.

The simple ideas thus arise in the mind from the activity of external forces, and presumably this would be as true of the simple ideas of reflection as of those of sensation. The formation of complex ideas is attributable to the mind itself. It may combine several simple ideas together; it may, by "setting them side by side," get its ideas of relation; it may by abstraction form general ideas. The mind is free to do what it wishes with its simple ideas, but apparently all that it does may be grouped under the heads of ideas of modes, substances, and relation. All such can ultimately be traced back to the simple ideas of which they are composed, and Locke in a series of chapters shows how this can be done. The analysis of these complex ideas was later on the source of a movement in France which became known as *Ideology,* named and developed by Destutt de Tracy, a disciple of Condillac. Its history in that country will be sketched later in this book, but it may be well to hint here at its importance, for it passed from Ideology into fiction in the novels of Stendhal and from him became a dominant mode in literature. That the discovery of elements through analysis was an understanding of the materials of experience was based upon the notion that simplification was explanation. When it was combined with the experimental method in science, it gave us a new laboratory technique which could be applied with some literalness to chemical compounds; but when it was associated with the assumption that elements were somehow more real than the compounds which they made, then a metaphysical theory was adumbrated which, at least in the opinion of some writers, led only to confusion. At the present moment, for instance, it is believed in certain quarters that the occupation of philosophers is exclusively the analysis of meanings into elementary terms which are discovered in perceptual experience. Consequently it is inferred that ideas which cannot be so analyzed are nonsense. This is purgation with a vengeance, for it excludes any possibility of there being any meaning in a strict sense of that word in the rules by which we proceed. This was of course not Locke's intention. He himself admitted that some of the objects that produced secondary qualities in us were insensible. He also granted, as we have seen, the existence of a mind, which by its very nature could not be perceived, and of its activity.

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[16] In fact, that it "comes from" anywhere is an assumption. All that experience shows us is that we have it and that it changes.

But he also in this part of the *Essay* seems never to have questioned the notion of a standard observer whose experience would be the test of the truth of his conclusions. The influence of habit, or even of education, upon the formation of ideas gave him little if any concern. His frequent appeals to the general consensus seems evidence of his disregard for the varieties of experience. It was not experience in the general sense that turned Aristotle toward teleology and the Atomists toward mechanism, though what they actually saw and heard as colors and sounds may have been highly similar. Experience as used by Locke in the passages which we have been discussing is just as mysterious as innate ideas, the transcendental unity of apperception, or the Mind of God. It turns into nothing more than a name for the fact that statements about the world can be made in such a way that various individuals can agree upon their meaning. But the agreement often comes through the conventional use of certain symbols, by definitions previously agreed upon, and by the habitual application of certain explanatory formulas. Locke's own treatment of experience was to justify the belief of his successors that the community of ideas was a mystery. It gave rise to such problems as the existence of an external world, of the past and future, and indeed of other men's minds. Oddly enough, he did not himself see that these questions were involved in his conclusions any more than he saw what Berkeley was to see immediately: that the same reasons which made us believe in the subjectivity of the secondary qualities would entail a belief in the subjectivity of the primary.

In view of some of the later discussions of Locke's theories and of the importance of the idea of cause in his own philosophy, we ought perhaps to discuss briefly what he meant by the notion. The problem of causation arises when we observe the occurrence of change, he maintains (*ed. cit., Essay,* Bk. II, ch. xxvi, 1). In this he is, of course, true to history. The unchanging requires no explanation according to tradition, whether philosophic or scientific. If there were no change, there would be no problems, and all problems are resolved when there is found to be an unchanging something which "supports" or "undergoes" the change, or when the change itself is seen to be describable in terms of a regular law. Tradition assumes that nothing changes "of its own accord," that the "natural state" of things is rest or immutability. It would, to be sure, be possible to accept change as an occurrence quite unproblematic in its nature, in which case stability would become problematic. But in Locke's time such an attitude was never taken.[17] One observes that some things begin to exist and that "they receive this their existence from the due application and operation of some other being." Locke apparently saw no difficulties involved in the meaning of the terms "application" and "operation," though Hume was to find them in quantity. Now the Scholastics with their theory of sensible species were able to describe causation as the passage of such qualities from one substance to another, much as Aristotle in one passage describes the heat of a masseur's hand passing into the body of the person whom he is massaging.[18] But Locke, though at least his secondary qualities could have floated from one body to another, did not describe causation in the traditional manner. He leaves the whole matter as it was left by Bacon: "Finding that in that substance which we call wax, fluidity, which is a simple idea that was not in it before, is constantly produced by the application of a certain degree of heat we call the simple idea of heat, in relation to fluidity in wax, the cause of it, and fluidity the effect"

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[17] Frazer, in his edition of the *Essay,* shows that Lotze makes the point that even metaphysical inquiries "so far as their essence is concerned, will always move" about the "fact of change." *Ed. cit.,* Vol. I, p. 433, note 1.

[18] In fact, Aristotle's presuppositions about change lay behind the Scholastic treatment of the subject. For Aristotle on change, see my "Aristotle's Presuppositions About Change," *American Journal of Philology,* October, 1947, pp. 404–13.

(*ed. cit., Essay,* Bk. II, ch xxvi, 1). The most charitable interpretation of Locke's treatment of this important, in fact central, idea is that he was exclusively interested in its origin, not in its correctness.

A second idea whose importance in the subsequent development of Locke's philosophy is very great is the idea of the self. Here, in contrast to his handling of the problem of causation, we know that Locke was not only interested in the origin of the idea of self but in the nature of the self. Personal identity, he maintains, resides in consciousness (*ed. cit., Essay,* Bk. II, ch. xxvii, 11). But personal identity is not equivalent with the spiritual substance (soul) which is the agent of consciousness. The *I* is the object of our awareness; we are not aware of our spiritual substance. In fact, if two different spiritual substances could have exactly the same consciousness, they would have the same personal identity. As a matter of fact, the *I* who is now conscious need not be of the same substance, both spiritual and material, as the *I* who was conscious yesterday, but if there is continuity between the two consciousnesses, there is no reason to deny personal identity to them. Moreover, if a person awake and asleep does not have the same consciousness, he infers that they are two persons. "To punish Socrates waking for what sleeping Socrates thought, and waking Socrates was never conscious of, would be no more of right, than to punish one twin for what his brother-twin did, whereof he knew nothing" (*ed. cit., Essay,* Bk. II, ch. xxvii, 19). From this it would appear that Locke assumes the existence of an ego which is the agent of thinking and a set of ideas of which he is conscious. And yet it is the continuity of the latter which determines self-identity. This ego is "annexed to" one soul in all probability (*ed. cit., Essay,* Bk. II, ch. xxvii, 25). But, though Locke seems to be unaware of the problem, the question must be raised of how we know that there is any such ego, since it is clearly neither a single secondary or primary quality nor a group of them, though it is a complex idea. The only evidence which Locke advances is that it is "impossible for any one to perceive without *perceiving* that he does perceive." And he continues, "When we see, hear, smell, taste, feel, meditate, or will anything, we know that we do so" (*ed. cit., Essay,* Bk. II, ch. xxvii, 11). But the kind of knowing that is involved in this is not the kind that is involved in the immediate apprehension of a quality or, more strictly, of the idea of a quality. It is knowledge that comes from dialectical reasoning about what is supposedly implied in the facts of consciousness. Regardless of whether one is really always aware of awareness or not, is one aware, as Descartes maintained one was, of the presence of a perceiving self? If the idea of the self is a compound of elementary ideas, and if the elementary ideas are ideas of qualities, then there is no more reason why a self should be involved in perception than not. The very idea of identity is an idea formed by the operation of relating two things together. But the operation of relating is itself performed by the mind and the mind can relate only those things which it perceives. There is no ground for believing, as far as the *Essay* is concerned, that among these things is the self, for the self is that which does the perceiving. One could easily explain on Locke's principles how two objects of perception are identical, but not how something which is not perceived is anything whatsoever. It can only be inferred then that Locke is reverting to a dialectical argument of some such sort as that all perception demands a perceiver.

If Locke had written the fourth book of the *Essay* before he wrote the first, the situation would have been clarified. For the fourth book, which deals with the second part of knowledge, that is, assertions and judgments, assumes the existence of an active mind which organizes its ideas in accordance with certain categories. The ideas in this case are far from being perceptual qualities; they are capable of truth or falsity. It is true that when he comes to define "knowledge," he calls it *"nothing but the perception of the connexion of and agreement, or disagreement and repugnancy of any of our ideas"* (*ed. cit., Essay,* Bk. IV, ch. i, 2), but one should not be misled by the word "perception." He is not thinking merely of the direct apprehension of qualities, but of consciousness or awareness. This is clear from his examples, one of which is the truth of a geometrical theorem. The kinds of agreement and disagreement are four in number: identity or diversity, relation, coexistence or necessary connection, and real existence. The first is easy enough to understand; it is the awareness of the specific identity of an idea and hence its difference from other ideas. The second is also simple; it applies in comparisons and contrasts. The third applies to substances and arises when one attributes or can attribute to a substance certain ideas without contradiction. The fourth, which is the most difficult of all to grasp, is treated with the least detail; it involves the assertion that certain ideas apply to real or existing things. His example is, "God is." But just what is entailed in the predicate of existence is not examined by him. He is sure that only particulars exist. He is also sure that the primary qualities exist. He is convinced that the mind knows real things only through the medium of ideas about them. And when he comes to the question of "the reality of knowledge," (*Essay,* Bk. IV, ch. iv) he asserts that only a conformity between our ideas and the reality of things is the test of truth. But when he comes to the criterion of the reality of simple ideas, the best he can offer is their pragmatic value. They "must necessarily be the produce of things operating on the mind, in a natural way, and producing therein those perceptions which by the Wisdom and Will of our Maker they are ordained and adapted to. From whence it follows that simple ideas are not fictions of our fancies, but the natural and regular productions of things without us, really operating upon us; and so carry with them *all the conformity which is intended; or which our state requires:* for they represent to us things under those appearances which they are fitted to produce in us: whereby we are enabled to distinguish the sorts of particular substances, to discern the states they are in, and so to take them *for our necessities,* and apply them *to our uses*" (*ed. cit., Essay,* Bk. IV, ch. iv, 4; my italics). This is a far cry from the so-called copy theory of knowledge. For an idea would no more need to copy its object for our necessities and uses than a word to copy that which it names. They are true in the same sense that other signs may be true. That a solid object is impenetrable is shown to us by the feeling of resistance we have when we push against it; but that need not entail the belief that the feeling of resistance is in the object. Its truth is shown by our inability to penetrate it, and that inability in itself is enough to guide us in the necessities of our lives.

The complex ideas, with the exception of those of substances, represent nothing but themselves, are fabrications of the mind, freely put together, and are made "without considering any connection they have in nature." They are what we think about and are their own originals. And, as if Locke were anticipating Kant, as he perhaps unconsciously echoes the Platonists, "in all our thoughts, reasonings, and discourses of this kind, we intend things no further than as they are conformable to our ideas. So that in these we cannot miss of a certain and undoubted reality" (*ed cit., Essay,* Bk. IV, ch. iv, 5). This kind of knowledge is, or can be made to be, self-consistent, and in its self-consistency lies its truth. If there are any things corresponding to its contents, then our complex ideas will be true of them also. So, in mathematics, there may not be any real triangles anywhere, but if there are, then what is true of our ideas of triangles are true of them too. Such ideas he likes to call archetypes, and when he is discussing their truth, he writes as if the real existence of those things of which they are the archetypes were of no special interest. He believes firmly in the necessity of such purely formal knowledge not only for mathematics, but also for ethics, and, though he never came to the point of demonstrating with mathematical certainty the truth of ethics, yet he strongly emphasizes its possibility. Existence, in the sense of the world of things, is cut off from complex ideas, except when they are ideas of substances, and hence it would seem as if the exemplification of our archetypal ideas were a matter of chance. Thus he does not worry about the relation of things to ideas, as Plato did, though his world of complex ideas does—or at any rate could—form a logical system.

As for complex ideas of substances, a special problem emerges. The apprehension of simple qualities through their ideas can never be deceitful for the very reason that these qualities are whatever they happen to be. *Redness,* that is, is not an assertion about anything beyond itself. But when we have the idea of, let us say, a red apple, or judge that an apple is red, and when we are referring to a real apple, then we can be mistaken. For the object before us may not be an apple. There is no repugnancy in the combination of the ideas of red and apple, so that inconsistency is not the test of falsity in this case. There actually is a real—that is, material—object about which we are making the judgment and it can presumably be accurately described in terms of physical qualities. Only insofar as our complex ideas about it "conform" to its real qualities is our judgment true. Some elements in such complex ideas will not conform to those of secondary qualities. But the constant union of all the qualities involved will persuade us that there must be some external cause of their union. The same will be true of complex ideas arising from reflection. We can and frequently do err in making judgments of this type, but experience will tell us in the long run which ideas are true and which false. The long run will be instructive simply because it appears incredible to Locke that constant repetition of given complexes be purely coincidental. If a set of qualities is constantly conjoined, he argues, it must be due to no accident. There must be something about the nature of the substances—that is, the objects of our judgments—which causes or explains the conjunction. He does not believe that such true knowledge is likely to be often obtained. But he does believe that much of it is highly probable and apparently sufficient for our needs. Thus again he is not arguing for a copy theory of knowledge, regardless of what his critics have said. The basis for our confidence in knowledge of this type is the uniformity of nature. Whether complex ideas of substances copy the substances is of little importance if they recur on specifiable occasions. This implies that the complex idea of a unique object experienced at a single moment and position would be unverifiable. But that would follow from any theory of knowledge, however vivid and impressive the experience might be.

The empiricism of Locke, then, is very attenuated. For he admits that the mind has self-evident propositions; that it may profitably form consistent systems of ideas, as in mathematics and ethics, which are purely formal and yet may guide us in living; and that the formation of many complex ideas has its origin in the mind. In fact, the only ideas which are entirely empirical are those of the primary qualities. Yet his constant harping on the term "experience" has led most of his commentators to label him an empiricist, in the sense that all knowledge, both in form and content, is found in the immediacy of perception.[19] But he uses the word "perception" to mean not only ordinary sensory perception, but the awareness of anything, even of self-evident propositions. His empiricism is more like Bacon's, a belief that no knowledge is beyond rational criticism and must be tested both by logic and observation. The a priori laws of logic are not to be used for the construction of theories, and indeed he denies that they could be, but for the criticism of theories.

Because of his belief that most of our knowledge was at best only probable and not certain, it was reasonable that he should have opposed dogmatism in both religious and political philosophy. His views on religious tolerance follow naturally from his epistemology. In the *Essay* he argued for rational proofs of the existence of God, though he never denied the possibility or efficacy of faith. He points out in an eloquent and moving passage in the *Essay* (*ed. cit.*, Bk. IV, ch. xvi, 4) the necessity for tolerance and in his better known *Letters on Toleration* pleaded for a greater degree of freedom of religion than was customary at the time.[20] It will be recalled that Hobbes, believing that all ideas had practical consequences which might be socially undesirable, had maintained that only the sovereign could determine what was ultimately true or false. Locke makes a sharp separation between the duties of the state and those of the church. The former is concerned only with "civil interest," a term which includes "life, liberty, health, and indolency of body" as well as property. The church on the other hand is a "voluntary society of men, joining themselves together of their own accord, in order to the public worshipping of God, in such a manner as they judge acceptable to him, and effectual to the salvation of their souls." [21] This sharp distinction between spiritual and civic powers reflects the medieval symbol of the Two Swords, the cleavage between man's terrestrial and his celestial life, and probably the duality between soul and body. That the two kinds of interest are not so sharply distinguishable is obvious, for surely no one would deny that liberty is as spiritually oriented as it is materially and even the possession of property had its spiritual influences. Be that as it may, the distinction was traditional and Hobbes's decision was not followed. Locke, as we have shown, had pointed out that Socrates waking cannot be punished for the dreams of Socrates sleeping, and as he thought man's spiritual interests were internal to the soul, he undoubtedly also thought that they were as private as a man's other psychic activities.

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[19] To this A. O. Lovejoy is an outstanding exception. I owe as always a debt of gratitude to his penetrating insight.

[20] He did not, however, believe that atheists and Catholics should be tolerated, the former because they removed the main support for morality and the civic community, the latter because of their allegiance to a foreign sovereign.

[21] *An Essay Concerning Toleration*, in *Works*, 10th ed., London, Vol. VI, p. 10. All references to *Toleration* are to this edition.

If Locke restricts the power of the state, he also restricts that of the church. It can make no laws concerning property nor can it exert force to compel men to obey its commandments. Obedience to the church must come from free consent and any other form of obedience would amount to little more than hypocrisy. Members of a church may be expelled; they may be exhorted to do their religious duties. But association in a religious community arises from a sense of genuine communion or else it is false. Consequently the power of the magistrates must not be directed either toward separating a man from his church or forcing him to cling to it. Nor can separate churches interfere with the business of one another but must respect the rights of each to its own self-government. And therefore peace, equity, and friendship are always mutually to be observed by particular churches, in the same manner as by private persons, without any pretense of superiority or jurisdiction over one another." (*ed. cit., Toleration,* p. 18.)

This clearly is a flat denial of the principle of universalism. The determination of heresy and orthodoxy belongs to God alone, and not even the heads of specific churches can usurp that power. Each church then would appear to be equally right and equally wrong as far as men can tell. It is true that the churches themselves do not take this point of view; they all severally believe themselves to be right. They see no reason to permit the propagation of error, but in this they just happen to be mistaken. Locke has no objection to their preaching what they believe to be the truth, but they must not attempt to enforce their conception of the truth by the Sword of Caesar. Similarly the civil power must keep out of ecclesiastical matters. It no more knows the right way to salvation than do we poor individuals. "Princes indeed are born superior unto other men in power, but in nature equal. Neither the right, nor the art of ruling, does necessarily carry along with it the certain knowledge of other things; and least of all of the true religion" (*ibid.*, p. 25). Revelation is granted to us all, and we are free either to accept it or reject it. God has not forced us into compliance with His commandments and no earthly power should do so. The fact is that, according to the Lockean epistemology, each man is a separate atom cut off from all others except by means of verbal communication. Thus each will have his own idea of religious as well as of all other truths. Similarly, since there was no place in his theory for Platonic essences beyond space and time, the universal spirit of both mankind and religion is inevitably fractured.

Similar remarks will apply to Locke's views of politics. Written to refute Sir Robert Filmer's *Patriarcha,* a defense of absolute monarchy and published ten years before Locke's own political essays, the two treatises on government were a spirited defense of government of limited sovereignty.[22] The author himself says that they were written "to establish the throne of our great restorer, our present King William—to make good his title *in the consent of the people,* which, being our only one of all lawful governments, he has more fully and clearly than any prince in Christendom; and to justify to the world the people of England whose love of their *just and natural rights,* with their resolution to preserve them, saved the nation when it was on the very brink of slavery and ruin" (*ed. cit., Treatises,* Preface; my italics). The first of the *Treatises* is so completely given over to refuting the idea that Adam was given sovereignty by God as the universal father of mankind, that paternity inherently implies sovereignty, and such notions, that we can turn immediately to the second *Treatise* in which the author constructs his own theory of sovereignty.

In accordance with the tradition of Hobbes and his forebears, Locke begins by considering man in a state of nature. Man in that state is perfectly free to act as he will within the bounds of the law of nature and depends on no man for permission to do so. In such a state no man has more or less power than any other, but all are equally bound by the law of nature neither to destroy themselves nor anyone else in his "life, health, liberty, or possessions" (*ed. cit., Treatise* II, 6). Here their only sovereign is God, and all have the right and the duty to obey and to enforce His laws. Punishment may be meted out to offenders who transgress these laws, for the offenders by their acts declare themselves beyond the law. Thus, even in a state called natural, there are some individuals who act in an unnatural manner. This situation has its analogy in the story of the Fall of Adam as well as in those legends relating man's lapses from his primordial condition in the Golden Age or in the Age of Kronos. No reason was required by Locke to explain why men in a state of nature should violate its laws, since he says nothing whatsoever about their natural goodness or moral perfection. And as we have sufficiently emphasized his belief in the varieties of human experience, it is reasonable simply to say that he should have assumed primordial men to have differed in their desires as modern men do. Hence there may be injustice, as well as justice, in a natural condition, wickedness as well as goodness. But one can no more conclude to a natural state of war, as Hobbes did, than to a natural state of peace and benevolence.

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[22] The two essays were called *Two Treatises of Government* and first appeared in 1690. I use the edition of Thomas I. Cook, New York, 1947.

The state of nature, then, is a hypothetical condition assumed for purely theoretical reasons. Since governments differ greatly, both in their structure and in what they permit and forbid, he cannot believe that they are "natural." For it was a presupposition of the great tradition in philosophy and science—for the two were one until the time of Kant—that the natural state was one of uniformity. Difference was the problem, likeness the natural fact. Hence every discoverable difference between members of a class had to be explained. Locke's problem therefore was to imagine a manner of living in which there would be no governments. He assumes that life itself could not go on unless it had a right to and that this right rested upon health, property, and freedom to do what one would. For restrictions upon such things were again artificial, being precisely the things which were codified in statute law. That a state of war could ensue when men were living exclusively according to the Law of Nature followed simply enough, since without police each man had to protect his own life, possessions, and health. Men form societies in order to prevent the state of war, but where there is no organized society and no law, each man has to act for himself and rely on God's final judgment to adjudicate the rights and wrongs of his conduct. We see, it is hoped, that the absolute sovereignty of Machiavelli's Prince or Hobbes's belligerent savage remains with Locke's natural man.

But whereas according to Hobbes no individual or group had any right to depose the sovereign once he has been empowered to rule, the right to deposition remains in the people as a whole according to Locke. The notion of *The People,* which has such influence in the United States and has had similar influence in Europe since the French Revolution, is one of the most tenuous notions to grasp. In Roman times, the slogan "the Senate and the Roman People" makes a sharp distinction between the legislature and the people. In Livy (II, 56) the people are clearly opposed to the Senate and also to the plebeians. Justinian preserves the distinction between plebeian and the people, but maintains that the distinction is one between species and genus. To him the "people" are all the citizens, the plebeians part of them. But that the people are the citizens still leaves some human beings who do not form part of the people. I doubt whether Locke would have thought of women as part of the people and, as far as the right to depose the king was concerned, certainly resident foreigners would not have been part of the people. Whether men who had not the sufficient property qualifications to vote were part of the people is more doubtful, but Locke nowhere seems aware of the vagueness of the concept. But for that matter the Constitution of the United States which begins with the words, "We the People . . ." does not define who the people are, and it was not until 1920, when the Nineteenth Amendment was declared in force, that women became part of the people in the United States.[23] I suppose that Locke thought the term sufficiently clear for his purposes. At any rate, the legislature of a state is the heart and soul of the society which it governs and it derives its power from "the consent and appointment of the people" (*ed. cit., Treatise* II, 212). Consequently when it ceases to perform those acts which it has been given the power to perform, it may rightly be overthrown. This is true whether the sovereign is an hereditary monarch, an oligarchy of nobles, or "an assembly of representatives chosen *pro tempore* by the people" (*ibid.*, 213–23). Since these are the only forms of government which Locke knows about, one may conclude that revolution is always legitimate in his eyes when political power is abused.

The abuse of power always consists in the sovereign's depriving people of their property or reducing them to slavery. When this is done, then the government enters into war with the people and the people have the right to depose it. In such cases it is the government which is in rebellion against the people as much as the people who are rebelling against the government. It is the government who has broken the peace, who has been the initial aggressor, and since the people retain their rights they have every reason to terminate this war and make peace. None of this means, as Locke has insisted (*ibid.*, 243) that any individual retains the right of rebellion. It is the people as a collective body which retains it. So long as the government lasts, the political power rests in its hands. It is only when that power is misused and abandoned, that the people may take over and either form a new government or place the old in new hands.

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[23] And the amendment was rejected by Alabama, Maryland, and Virginia, states in which the moral virtues and special rights of women to protection have always been specially honored.

4. Berkeley and Collier

Locke himself in *An Essay Concerning Human Understanding* claimed to be a student only of epistemology, but beneath his epistemology lay a metaphysics according to which the mind and the body, or mind and matter, were two distinct substances, each operating according to its own laws. In this he was in harmony with Descartes and with what he was pleased to call the common opinion of mankind. The material world, he pointed out, could be adequately described in terms of the primary qualities, ideas of which duplicated them in our minds. The secondary qualities could not be attributed to matter but were effects made upon our minds by the material objects themselves. Thus physics gave us the "real" world; the rest was mental, spiritual, a human contribution to reality. The first edition of *An Essay Concerning Human Understanding* appeared in 1690. Twenty years later appeared two works which succeeded in drawing out of Locke's epistemology a metaphysics which Locke could not have foreseen and which, though based on Locke's own presuppositions, were a complete reversal of his position. I refer to George Berkeley's *New Theory of Vision* (1790) and his *Principles of Human Knowledge* (1710), soon to be followed by his *Three Dialogues between Hylas and Philonous* (1713). The subtitles of these works are revealing. Whereas Locke was interested in the extent of our knowledge, its limitations, the possibility of its being true, Berkeley was interested in demonstrating "the chief causes of error and difficulty in the sciences, with the grounds of scepticism, atheism, and irreligion," in the *Principles,* and in the *Dialogues* to "demonstrate the reality and perfection of human knowledge, the incorporeal nature of the soul, and the immediate providence of a deity, in opposition to sceptics and atheists." Briefly, his method of accomplishing these aims was to prove the immateriality of the objective world.

The *New Theory of Vision* attempted to prove that we do not perceive distance, size, and location by means of vision, but rather by means of what would probably be called today the kinesthetic senses —touch and movement. Distance is then a judgment made by us about our purely visual perceptions. Since distance is an interpretation of our visual data rather than a direct impression made upon our eyes, it must be "grounded on experience" rather than on sense

(*Vision,* 3).[24] But experience as Berkeley uses the term in this place is an accumulation of sensory data made over a period of time. Vision gives us a flat surface, something like a theatre curtain which, though it may look as if the objects painted upon it were arranged in three dimensions, is really a flat pattern. At this point an objector might remark that it is of no epistemological importance that we derive our knowledge of distance from muscular or visual sensations so long as we directly perceive it. But to this Berkeley replies that our judgments of distance are the results of habit, interpretations made very rapidly after experiencing the binocular vision, so rapidly that we have no consciousness of what we are doing (*ibid.,* 20). He appears to take it for granted that his readers will appreciate the curious effect which appears in habitual behavior of the telescoping of time. An act which becomes habitual becomes also shorter in duration until it becomes almost instantaneous. Because of this we lose consciousness of the reasons why we judge distance; the distance seems to be perceived in exactly the same way as the color. That habit can modify our immediate perceptions would be admitted by contemporary psychologists; its theoretical importance for Berkeley lies in its supposed proof that certain features of our perceptual life can be normal and yet delusive. The perception of distance seems, like any other immediate experience, indubitable and harmonious with what we know from, let us say, geometry about the world of space. In reality it is read into the external world on the basis of past experience. That space itself may be projected into the world of objects by us, rather than introduced "into our minds" by the objects themselves, was something which the English Platonists were emphasizing and which Kant was later to demonstrate as an essential and revolutionary detail of his epistemology.

Not only is the perception of distance a judgment made by us about our visual sensations, but there is no necessary connection between any visual pattern and any spatial location. Berkeley very shrewdly points to mirror images to demonstrate this (*ibid.,* 45). What we see in a mirror may accurately duplicate what we see in space, but the mirror space is certainly not of three dimensions, except through an illusion. Consequently the judgments which we make of distance are not logically related at all and we may well be deceived by them. At this point (*ibid.,* 47 ff.) he introduces the observation that each of our senses has its own objects; we do not, strictly speaking, see and hear the same things. But nevertheless we speak of them by the same name as when we say that we hear the bell which we are looking at. By extension one may argue that each of our senses has its own objects, those named by the names of the sensory organs. How then do we fuse them into single objects, things, which we then say we see, hear, taste, smell, and touch? This was answered in Aristotelian and Scholastic psychology by the assumption of a common sense which bound our various sensory impressions together, or, to use more classical language, which *reified* them. But Berkeley in the *Theory of Vision* is, for the most part, more interested in proving that vision is incapable of giving us a world of material objects external to us, and he does it by pointing out the discrepancies between its evidence and that of touch. For we clearly touch and handle physical objects, and one could almost maintain that our belief that physical objects have a kind of cohesiveness which is the ground for our calling them one object, resides in touch. But the very objects which we feel to be one we see to be many, for a single tangible object may be of various colors. The independence of the two senses, and by extension of all our senses, is the basis of much of his later theory. We ought by logic to conclude that if there are five senses, there are five kinds of objects, and the fusion of the five sorts of sensory data into single objects is simply a result of habit, and not of logic.

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[24] References are to the edition of Alexander Campbell Fraser (Oxford: Oxford University Press, 1901).

If Berkeley had written only the *New Theory of Vision,* one might have concluded that he was simply trying to point out that the world of physics is known by touch and that the tangible evidence for its properties is discordant with the visual evidence. But that might have been merely added support for the interpretation of the world which was given by Locke and what one might call the Galilean Tradition. But he is really interested in showing that all sensory data are on the same plane. They are all subjective, whether tangible or visual or other. All that we know immediately are ideas, and the distinction between ideas of primary and secondary qualities must vanish before a critical analysis of their meaning. But there must also vanish the distinction between particular and general ideas, for if we could immediately perceive general principles, Platonic essences, medieval universals, then we could claim a direct apprehension of the truth. But Berkeley was a bishop and his purpose was, as we have said, to refute scepticism and atheism. If one could immediately grasp general ideas, one could by inference limit all valid knowledge to what was immediately perceived. Berkeley wishes to retain the individuality of the perceiver, to set up a world of individual minds united in religious, but not empirical, communion. By this I mean that it was not necessary for his purposes to grant to each perceiver a direct knowledge of a world external to him and common to all, but rather to grant them a similar relation to God, Whose existence he was to find essential to his metaphysics. His arguments for the subjectivity of our ideas requires no elucidation. What could an idea be if not a mental thing? It might refer to something non-mental, but it would be as foolish to speak of non-mental ideas as it would be to speak of imponderable weights or invisible colors. It is for this reason that Berkeley, almost at the opening of his *Principles of Human Knowledge* (*ed. cit.,* Part I, 3), asserts that the being of things is their being perceived, their *esse* is *percipi.* Since all things are known as either single sensory qualities or groups of them, and since sensory qualities are examples of ideas, it is impossible "they should have any existence out of the minds or thinking things which perceive them" (*ibid.*). For him the contrary would be a contradiction in terms or, if one will, the principle is self-evident.

But he also asserts, and with less skill, that there must be a perceiving mind to entertain the ideas.

> Besides all that endless variety of ideas or objects of knowledge, there is likewise Something which knows or perceives them; and exercises divers operations, as willing, imagining, remembering, about them. This perceiving, active being is what I call *mind, spirit, soul,* or *myself.* By which words I do not denote any one of my ideas, but a thing entirely distinct from them, wherein they exist, or, which is the same thing, whereby they are perceived; for the existence of an idea consists in being perceived (*ibid.,* 2).

That there must be a perceiver to entertain or have the perceptions no doubt seemed as self-evident to Berkeley as it did to Descartes. But again, as was true of Descartes, he had no more evidence for the existence of a perceiving mind than he had for objects beyond the ideas. Linguistic usage, it is true, might induce one to assert that thinking "implied" a thinker, feeling implied a feeler, willing implied a willer, in short all acts implied an agent. But the implication is at best a matter of faith. Galileo had been able to think of material objects moving without a mover, either primary or secondary. Boscovich was to think of punctiform atoms only a few years later as centers of force. And in fact the substitution of functions for substances, as Cassirer has pointed out, was beginning at just about this time. Nevertheless, it no doubt seemed indubitable to Berkeley that if there was to be any thinking, it must be carried on by an agent of thought, and that agent he was to call the mind. The mind is by definition not an object of knowledge; it is not intuited, as it was in Descartes; its existence is held to be axiomatic.

The mind then perceives a set of ideas, and since an idea can resemble only an idea, there can be no material objects which they resemble. Whatever objects there may be must be of such a nature that our ideas can resemble them in some way. Hence that visual ideas resemble invisible objects, tactile ideas resemble intangible objects, and so on, seems nonsensical to Berkeley. He was not to deny that they were sometimes caused by objects existing outside the human mind; but he did deny that such objects were unlike them in their substantial nature. Similarly, as is well known, he denied Locke's distinction between primary and secondary qualities. For first (*ibid.,* 10), the primary qualities are always associated with secondary, and the secondary are admittedly subjective. That is, it is impossible, he maintains, to conceive of an extended and moving body which has not some color or other sensible quality. Second, and this argument would seem equally weak, many of the qualities of physical objects are relative, such as size and velocity, number and unity. This argument which was expounded in detail in the *New Theory of Vision* seems to assert that all relative properties must be mental, a technique which was used by many of Berkeley's Platonistic colleagues, as we shall see. But there is no inherent subjectivity in relatedness unless one can prove that the variations which are observed are functions of the mind rather than of something else. That is, though it is true that a distant object is observed to move more slowly than the same object close at hand, one might just as well attribute the change in velocity to the moving object as to the perceiving mind. For if only two terms are involved in the relation, one is no more responsible for the resultant effect than the other: the change in observed velocity is a function of two variables, not of one. Could one argue that the rust which arises when iron is put in water is a function exclusively of the water, or of the iron? Berkeley, whose *De motu* shows him to have had clear ideas about the relativity of position, nevertheless is insensitive to the possibility of a complex whose elements plus their relations have a certain property which is attributable neither to one element nor the other.

Another argument, and one which seems more solidly founded, arises from a consideration of what is meant by a material substance. It is the argument that neither the senses nor reasoning could demonstrate its existence. For as soon as we describe, or give some concrete meaning to the term, we find that we are forced to do so in terms of ideas which are granted to be mental. If any necessary connection could be shown to exist between such ideas and external material substances, then Berkeley would be willing to admit the existence of a material world. But one cannot even produce a causal argument, since in "dreams, frensies, and the like" we see bodies which we admit have no material sources resembling them (*ibid.*, 18). It is here that Berkeley introduces his famous statement of what Professor R. B. Perry felicitously called the ego-centric predicament.

> But, say you, surely there is nothing easier than for me to imagine trees, for instance, in a park, or books existing in a closet, and nobody by to perceive them. I answer, you may say so, there is no difficulty in it. But what is all this, I beseech you, more than framing in your mind certain ideas which you call *books* and *trees*, and at the same time omitting to frame the idea of any one that may perceive them? But do not you yourself perceive or think of them all the while? This therefore is nothing to the purpose . . . (*ibid.*, 23).

Apparently the perceived reference which some ideas have to things beyond themselves made little impression on Berkeley. The apparently continued existence of objects like his trees in a park or books in a closet was to be explained on other principles than that of their being the end products of nonideal objects existing in a nonmental world. Yet he did realize to the full the need of providing for some sort of common world of which we might have ideas, for he almost at once takes notice of the fact that there must be some reason why our ideas appear and disappear in a continuous succession. This reason, since it cannot reside in a material cause, must be an active spiritual substance.

If Berkeley had been able to conceive of ideas as simply the stream of consciousness, he would have sought for no cause external to them to which might be attributed their succession. He would then have arrived at a position in which the colors, sounds, shapes, smells, and tastes would have flowed along and, at most, would have distinguished between those which arose in a regular sequence and those which did not. But since he was already convinced that all ideas must be perceived by a mind and of the incapacity of anything other than Spirit which might be an active cause, he asserted the necessity of a spiritual agent which would cause the ideas to arise. This agent could never itself be an idea, and indeed Berkeley is emphatic in denying the possibility of forming an idea of an active force. We have a "notion" of such forces but no ideas of them. The critic might suggest that if we could believe in the existence of active forces of which we could form no ideas, then we might also believe in the existence of matter, of abstractions, and of relations. Be that as it may, the notion of an active spirit did what was demanded of it. Some of our ideas turn out to be voluntarily produced by us, as when we think about something which we wish to think about. But others are forced upon us whether we want them to be or not. "When in broad daylight I open my eyes, it is not in my power to choose whether I shall see or no, or to determine what particular objects shall present themselves to my view: and so likewise as to hearing and other senses; the ideas imprinted on them are not creatures of *my* will" (*ibid.,* 29). The will which produces them must then be that of someone else, and needless to say it is the will of God. The will of God establishes the laws of nature, those regularities which we are conscious of and which enable us to plan for the future. It also fixes the regular combination of certain ideas that are the complex things which, as we have noted above, were composed by the common sense in the classical tradition. These combinations are what we call real things as distinguished from the things of dream and fantasy.

We are now back where common sense started from. Berkeley knows that we require an overindividual world about which we may make true and false statements. God's mind takes its place. He also knows that when we are in error we substitute our personal and individual experiences for the ideas in the mind of God. Error would thus seem to depend entirely on the personal equation, but how the human mind can actually pervert the ideas in the mind of God is left obscure. Does God Himself accomplish this change for the purpose of trying our faith? If we are the causes of those distortions in God's ideas which are erroneous, how can we operate on the ideas that are perfect and eternal in order to corrupt them? Such questions do not seem to have troubled Berkeley, though it must be admitted that he may have intended to answer them in the unwritten second part of his book.

The outcome of the *Principles* is a belief in a community of perceiving minds directly inspired by a universal mind, God. These minds have a set of ideas which are caused by the ideas in the mind of God. The latter are eternal and regular; the former come and go and show only that much regularity which happens to occur in them. Our knowledge of other minds, as of God, is indirect. But though indirect, it may be confidently adhered to. The existence of the universal omnipotent and divine will alone explains the orderliness of Nature, and if one were to point to instances of disorder, "we should further consider, that the very blemishes and defects of nature are not without their use, in that they make an agreeable sort of variety, and augment the beauty of the rest of the creation, as shades in a picture serve to set off the brighter and more enlightened parts" (*ibid.,* 152). Thus atheism is refuted by the same sort of arguments that had been used by the Deists, bolstered up by peculiar epistemological theories. It remained for Hume to do for Berkeley what Berkeley had done for Locke: that is, to draw out of his conclusions inferences which he did not see. Two of the main theses of Berkeley were the necessity of causation and of personal identity. It was these theses which Hume did much to overthrow.

By one of those coincidences which so often happen in the field of invention, Arthur Collier, like Berkeley an Anglican divine, published in 1713 a little book entitled *Clavis universalis,* the subtitle of which was "A new inquiry after truth, being a demonstration of the non-existence, or impossibility of an external world." [25] There seems to have been no historical connection between Berkeley and Collier and, in fact, Collier's work was barely known until much later. But since the arguments of Collier are somewhat different from those of Berkeley and have a certain interest in themselves, it is worth discussing them here.

It was a common assumption of the time that there was no continuity of nature between the human mind and the material world. Common sense, the philosophies of Descartes, Bacon, and Galileo, had made precise the differences between the two kinds of being, differences so great that, as we have seen, men like Malebranche and Spinoza could not even believe in any causal interaction between them. One could with Malebranche deny causality as a whole and interpret the apparent interaction between mind and body as the intervention of God or, with Spinoza, retain causality but limit it to beings of the same fundamental nature. Berkeley and Collier, by denying the reality of matter, were able to retain causality as a relation between beings of the same nature, much as an out-and-out materialist might do. Collier does not deny that the objects of our perception have qualities which are usually assigned to matter: namely, those which follow from its being extended in space. But he wishes to argue that extension itself is a mental property and cannot be conceived as independent of a perceiving mind. He is definite in asserting that he is not denying the existence of bodies; to him, whatever is seen, is. His problem is the kind of existence they have, and that existence, he maintains, is that of all objects of perception. It is mental. Secondly, he states his conviction that the apparent externality of our perceptual objects is only to be explained as an act of God, Who made them to appear in that fashion. Third, he does not maintain that the external world exists in his body, and, fourth, he does not maintain that it depends on his will, which he sharply distinguished from the intellect or perception.

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[25] An excellent edition of this rare work was edited in 1909 by Ethel Bowman (Chicago: Open Court Publishing Co.).

Fifth, he recognizes the individuality of the actual perceptions which we apprehend or are conscious of, so that one man's visual data are existentially different from those of another man. Finally, he does not maintain that each mind creates its own world, but on the contrary there is a world external to individual minds, but it is not material.

By taking the visual world as his model, Collier proceeds at once (Part I) to prove to his own satisfaction that it is not external to the perceiving mind. That it seems to be external he grants, but he is too accustomed to the illusions of the senses to accept what seems as proof of reality. Anticipating Hume, he points out that the only empirical difference between something imagined and something seen is the vividness of the object. One may imagine a mythical being—his example is a centaur—either faintly or strongly, and the only perceptible difference between a strongly envisioned centaur and a real centaur is the degree of vividness with which one sees it. He appeals here only to whatever is actually before one's mind, not to explanations of a physical or psychological sort. If there is no perceptible difference between what recent psychology would call images and what it would call sense data,[26] except the degree of intensity with which they appear to us, then by what right do we assert that one is of a different nature or kind from the other? But we all admit, he continues, that certain sensations which we all grant to be only "in the mind" seem normally to be external; sounds, smells, tastes, heat, pain, pleasure. That these are internal—or subjective—he does not prove but accepts from the demonstrations of Descartes, Malebranche, and Norris. He might of course have also cited Hobbes and Locke, whom he must have had some acquaintance with, but, since these philosophers also believed in the "absolute existence" of matter, that may have been the reason why he preferred not to cite them. There is also the case of men who suffer from visual hallucinations and that of the prophets whose visions look external but are really internal. He calls upon his reader to look at a visual object, such as the moon, press on one eyeball and he will then see two moons. Both look external, but in reality only one can be. Finally he calls up the case of mirror images. These, too, look as if they were arranged in external space and, if we were to rely exclusively on the visual evidence, we should have to conclude that they were indeed external. But the glass is not space and Collier can find no better explanation of their whereabouts than to say that they exist in the mind of the person looking into the glass. So much is adduced to show that the apparent externality of a perceptual object is no proof of its real externality. If it were, then the distinction between what seems and what is would not be so difficult to make as it is.

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[26] I say "recent" since some psychologies of the behavioristic type have flatly denied that there are any images.

The instance of the two moons seems to Collier of peculiar importance, for he dwells upon it at some length and it is, moreover, an experiment which anyone can make for himself. If one can limit an object to its visible appearance, then the question of how to distinguish between one moon and the other is crucial. Both moons are seen; both have exactly the same appearance; they are therefore interchangeable and in themselves do not proclaim their external reality. Moreover, the discrepancy between the perceived moon and the astronomical moon is too great for one to be identified with the other. This argument does not deny the existence of the astronomical or physical moon; it simply accepts its description as given by astronomers. It was no great trick to point out that the physical moon is neither luminous, nor a plane smooth surface, nor about the size of a shilling. It is on the contrary, dark, spherical, and a body many miles in diameter. Can a single physical object have such different properties? Collier thinks not. The qualitative differences are too great to permit them to be attributed to a single material thing. He heaps up industriously these differences, and he concludes, as Berkeley did—and in almost the same language—that the being of visible objects is identical with their being perceived. "They exist as visible, or in other words, their visibility is their being. This therefore destroys all or any distinction between their *being,* and their being *seen,* by making them both the same thing" (Bowman *ed.,* p. 36). The problem should now arise, but does not, of why and how a series of different visual images or perceptions should all be fused into one. For if there is a single visual object, whether mental or material, and if the diversities listed cannot all belong to or qualify the same object, then the problem remains as before, and Collier must either assert that there is no single moon whatsoever or explain its diverse appearances. He could, to be sure, note the various visual moons and the order and circumstances of their appearance and set down a rule in accordance with which he could predict what would be seen on what occasions. Or he could have relapsed into a kind of naïve realism and conclude that whatever is seen exists as it is seen, regardless of our presuppositions about Galilean physics. The moon then would turn into a set of visual percepts defined by a system of relations. But he, like most people, wanted a world of things with universal and invariable properties. This world was Berkeley's ideas in the mind of God. But though Collier does say that God has so arranged things that our visual and other perceptions give us a quasi-external world, he sets forth no such theory as that of Malebranche's vision in God or Berkeley's to round out his metaphysics. He is satisfied with disproving the external existence of anything whatsoever.

He does say that "reason converses only in things necessary or eternal, whereas a creature, as such, is contingent and temporary; so that in vain shall we seek to reason to assure us of the existence of an external world" (*ibid.*, p. 56). If existence cannot be proved, and most philosophers would agree on general principles, then we must find some nonrational evidence for existence. This is usually found in some sort of sensory experience or controlled observation. It might be found in Revelation; but Collier defies anyone to cite a passage of Scripture in which the existence of an unperceived external world is cited. It might be a sort of unknowable world, like the "inner natures" which were so popular in the seventeenth century. But Collier maintains that unknowables are as good as non-existent. One must conclude either that he postponed treating the subject of how the idea of externality arises, as well as the distinction between truth and error, or that he did not see the importance of the problem.

Curiously enough, he was unusually keen in criticizing others and in his analysis of the idea of an external world anticipates Kant's doctrine of the antinomies of the pure reason. We shall see that much of Kant was already potentially in the English Platonists and Rousseau, but it may be of interest to indicate Collier's contribution to the thesis here. In his third argument against the existence of an external world (Part II, ch. iii) he maintains that such a world could be shown to be both finite and infinite. If this is so, then belief in such a world would be founded upon inner contradiction and hence would be nonsense. The finitude and infinitude in question is that of spatial extension, as well as that of divisibility. In other words, he maintains that there are arguments proving that the external world is both finite and infinite in extent and finitely and infinitely divisible. First adducing the beliefs of philosophers on both sides of this question, to show that both sides have been held in history and presumably—though he does not demonstrate this—with equal force, he advances the argument that in both sorts of worlds motion would be impossible. That a world infinite in extent would be immovable is shown by assuming that motion demands change of place. In a world infinitely extended there would be no place to move into. Therefore an infinitely extended world could not move. But similarly if the world is infinitely divisible, motion would be impossible. For a body which traverses space must traverse all its parts. If there is an infinite number of parts, the moving body would have to traverse them all and hence it would take as long to cover a small amount of space as a long. For "to every point of space or line through which any body is supposed to pass, there must be a point of time correspondent" (*ed. cit.,* p. 82). This is, as students of ancient philosophy will recognize, the same argument as appears in the puzzles of Zeno, the Eleatic. Zeno, however, concluded that no motion was possible. Collier, on the other hand, accepts motion as real and hence denies the infinity of extension and of divisibility. Unfortunately he does not apply his argumentation to the question of a finite world, showing that in such a world motion would be impossible. Indeed, he seems to think that the existence of arguments on both sides is sufficient for his purposes. He is therefore far from being a Kantian *avant la lettre,* for Kant's reasoning, as we shall see, attempted to prove both sides of the debate as equally valid and thus to show that reason could not operate in the world of things-in-themselves.

Collier remains, on the whole, as an interesting historical curiosity, though his American editor, Miss Bowman, has shown that he was known and discussed in Germany as early as 1717. At the same time he is evidence of the interest such questions aroused in the England of his age. When certain epistemological questions are seriously debated by an obscure rural parson and debated on the grounds of the writings of Descartes and Malebranche, the historian can conclude that they formed part of the intellectual atmosphere of the period under investigation.

Berkeley's treatment of motion has as its goal the proof that all motion is relative and therefore cannot exist in a material world, since a material world, he believes, must be describable in absolute terms. If he could prove that any supposedly fixed attribute or property was relative to human observation, he felt that he could also conclude to its subjectivity. And since he had proved that all bodies were perceived bodies, and hence subjective, and since he argued that unoccupied or pure space was nonsensical, the only evidence of motion in space would be that perceived to exist when two perceived bodies stood in certain spatial relations to each other (Fraser *ed., Principles,* Part I, 116). He, too, then admits the existence of motion as a perceptual experience, but denies that there is anything whatsoever corresponding to our supposed idea of empty space.[27] Both Collier and Berkeley were satisfied to show the subjectivity of the objects of our knowledge, whatever such objects might seem to be. Though Collier, as we have said, was more interested in demolishing the arguments in defense of objective reality, Berkeley on the contrary saw that he had to give them some status in a universe in which there were both individual and at least one universal mind. The mind of God replaced the world of absolute space and time and of independent objects. He was the more careful thinker and the shrewder. In the epistemological writings which we have examined, he does not dwell in detail upon the metaphysical picture. That he reserved for his other books and in them, especially the *Siris,* the panorama of a cosmos ideal in its nature is painted fully. But that work we shall leave for the chapter which follows.

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[27] Cf. his *De motu* (*ed. cit.*), p. 52. In the *Siris,* especially sections 253–54, he takes the matter for granted.

5. Hume

The two realities which Berkeley never questioned were the mind and the principle of causality. Of the mind as a perceiving agent we have but what he called a *notion.* Causality was accepted as necessary for understanding how those ideas that we ourselves do not create arise in our minds. But for him matter, being inert, could cause nothing. Cause was the power exercised by a will, whether human or divine.

The attack upon these two fundamental ideas, an attack which still has its proponents, was made by David Hume (1711–76), a philosopher whose literary style was matched only by that of Berkeley and Hobbes, and whose ingenuity and dialectical skill continue to excite admiration. Historians are not supposed to express their enthusiasm for the men they write about; but one would be dull and insensitive not to respond to Hume's charm. By accepting the logical technique of his two great predecessors, he was able to carry on their conclusions to a point which they did not and possibly could not foresee. For if they could have, it is likely that they would have anticipated his objections and attempted to answer them. Let it be admitted then that our delight in Hume's wit and analytical ability may have prejudiced us in his favor. With this apology we continue.

Though Hume is usually thought of as a sceptic, there were some things which like Descartes he did not think of doubting. His premises are clearly set forth in the introduction to his major work, the *Treatise of Human Nature,* published in 1738 when its author was twenty-seven years old.

1. The relation of all science to the sciences of "Human Nature."

This does not appear as a postulate in Hume, but rather as a demonstration. But the demonstration rests upon the assumption that all science is part of human knowledge and is judged to be true or false by human beings. This means that Hume accentuated the adjective "human," and believed human nature to contribute something to knowledge. The mind for him was thus not simply a pure crystal lens through which a completely unprejudiced eye observed the world of facts. He was aware of the novelty of this assumption, for he says in his Introduction to the *Treatise,* "We in effect propose a complete system of the sciences, built on a foundation almost entirely new, and the only one upon which they can stand with any security."[28]

2. "Experience and observation" as the foundation of the science of Human Nature. By "experience and observation" Hume thinks he is in agreement with Bacon and Locke, but as the *Treatise* proceeds, he makes it clear that what he means by experience is purely perceptual observation, i.e., what he calls "impressions and ideas."

3. The unknowableness of inner natures, essences, ultimate principles. That the mind, the material world, and Human Nature had "ultimate original qualities," seems to have been recognized by Hume as true, but he maintained, as Gassendi did, that they were beyond knowledge. To attempt to discuss such things is, he says, "to be rejected as presumptuous and chimerical." He has no objection to general laws and principles which are derived from experience itself and believes firmly in reducing the complexity of observation to as great a simplicity as possible. Unfortunately he does not tell us by what rules of procedure we ought to carry out the simplification and generalization, nor does he explain in any detail how we acquire knowledge of such rules. But in this he does not differ from his contemporaries. Locke and Berkeley, too, insisted that experience alone could reach the truth and also accepted the traditional manner of organizing what experience gave us. Hume, who is a much more careful thinker than Locke, if not than Berkeley, sometimes goes to lengths which are astonishing. For in one place —to cite but a single instance—when he is discussing memory and the imagination, he allows himself to say that "neither the lively nor faint ideas, can make their appearance in the mind, unless their correspondent impressions have gone before to prepare the way for them" (*ed. cit.,* Bk. I, Part I, 3). But the simple observation of what passes before our mind could not by its very nature tell us that ideas

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[28] I am using the Everyman Edition of the *Treatise,* edited by A. D. Lindsay, since it is easily procured and complete.

had any past history whatsoever, to say nothing of the causes of their appearance.

With these three premises he begins his analysis of human knowledge. The general field of experience is called perceptions of the human mind. We shall not dispute his distinction between the human mind and what is before it, since he had to begin at least by using common language. The field of perception is divided into impressions and ideas, the latter of which differ from the former only by their vividness. That means that the only perceptible difference between, let us say, the impression of a red square and the idea of a red square is the force of the former and the relative weakness of the latter. Whether an impression is of a sensation, a passion, or an emotion, it may have an idea corresponding to it and the only difference between the one and the other is the degree of forcefulness.[29] Hume also points out that when an idea is very strong or an impression very weak, we have difficulty in distinguishing between them. Here Hume is not making a metaphysical statement, but an epistemological statement. He is interested in determining how we distinguish in experience itself between what common sense calls real things and what it calls ideas of them. The only evidence that we have, he says, is the vividness of some of our perceptions. Following tradition he also distinguishes between simple and complex perceptions, the simple being those "that admit no distinction nor separation," the complex those that do. A simple perception, whether impression or idea, would be the perception of a color or sound or smell and the like; a complex, as is obvious, the perception of a colored, odorous, sonorous object, like a twig of hemlock shaken in the wind. Simple perceptions are always similar in quality, whether impressions or ideas; complex, however, may not be. "I observe that many of our complex ideas never had impressions that corresponded to them, and that many of our complex impressions never are exactly copied in ideas. I can imagine to myself such a city as the New Jerusalem, whose pavement is gold, the walls are rubies, though I never saw any such. I have seen Paris; but shall I affirm I can form such an idea of that city, as will perfectly represent all its streets and houses in their real and just proportions?" (*Ibid.*) He concludes that all simple ideas are derived from —that is are copies of—simple impressions.

So far Hume has only introspection to guide him. As was to be often the case in the *Treatise,* he had to rely on what his own experience told him. But he fully realizes the fact that someone may raise the question of whether the impressions did not copy the ideas. For the Platonistic school had reversed the usual order in building up its epistemology. If we are limited to what we observe, and if what we observe is simply impressions and ideas rather than things in the external world, we have no evidence of which is the copy of which. But he maintains that the first appearance of a perception is always an impression and that the idea follows it. Experience—which in this case can be only memory—shows a constant conjunction of impressions and ideas, and from the constant conjunction he concludes to a causal relation, since such events, he maintains, can never be the result of chance. That the impressions are the causes of their corresponding ideas is proved by their always occurring first. He checks his findings by pointing to people who lack some perceptive faculty, those born blind or deaf. Such people, he observes, have no ideas that those with a normal perceptual apparatus possess. And we ourselves who hear of things of which we have no impressions, such as the taste of a pineapple, cannot form a just idea of them.

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[29] See p. 213 for Collier's observation of the same distinction.

With a kind of scrupulous honesty which is rare among philosophers, he singles out an exception to the rule, a negative instance which ought to disprove his whole generalization but which he will not allow to do so. If a person with normal vision and normal experience of the gradations of colors, should be shown a scale of blue from the deepest to the palest in which one degree of intensity is missing, he will note the gap in the scale even if he has never actually seen that particular shade of blue. But not only will he note the gap, he will, says Hume, he able "from his own imagination, to supply this deficiency, and raise up to himself the idea of that particular shade, though it had never been conveyed to him by his senses" (*ibid.*). Though Hume dismisses this exception as of no importance, he overlooks the use which was made of similar facts to prove that general forms of knowledge may determine ideas. If the knowledge that something is missing in a series can supply us with a faint image of that which is lacking—for it must be remembered that ideas are images of impressions—then the principle might be extended further to such ideas as that of a first cause, a final cause, or any other item of possible experience which can be interpolated into a series of ideas or impressions, or extrapolated beyond it. For instance, one might maintain that from the grades of human intelligence running from animal stupidity to the brilliance of an intellectual genius, we could extrapolate higher grades of intelligence which would be superhuman, and thus establish all the nine choirs of angels ending in the Mind of God. Thus, in the metaphysics of

Royce we find a philosopher arguing that from differences in the lengths of human specious presents we can extend a series running up to the "chronosynoptic" vision of God to Whom everything is a *totum simul.* But Hume fails to see the dangers which his exception to the rule permits.

Hume slips again when he comes to the matter of dividing impressions into those of sensation and those of reflection. It is easy enough to understand what the distinction is, but Hume allows himself to give a causal explanation of it. Thus he flatly says that sensory impressions originate from unknown causes, whereas those of reflection are caused by those of sensation. I call this a slip, since the stream of perceptions could not tell us anything whatsoever about the origin of a perception in an unknown cause or, for that matter, in a known cause. A perception, he insists, is a separate and distinct being, each having its own individuality, both qualitative and existential. How then could any perception inform one of its origin and where would the idea of an origin come from? Moreover, Hume proceeds to give a detailed account of the rise of impressions of reflection, no part of which could according to his own theory be found in perceptions.

> An impression first *strikes upon* the senses, and *makes us perceive* heat or cold, thirst or hunger, pleasure or pain, of some kind or other. Of this impression there is a copy taken *by the mind,* which remains after the impression ceases; and this we call an idea. This idea of pleasure or pain, when it returns upon *the soul,* produces the new impressions of desire and aversion, hope and fear, which may properly be called impressions of reflection because derived from it. These again are *copied by the memory and imagination,* and become ideas: which, perhaps, in their turn, *give rise to* other impressions and ideas; so that the impressions of reflection are not only antecedent to their correspondent ideas, but posterior to those of sensation and *derived from them.* (*Ibid.,* sec. 2.)

The portions of the above which I have italicized indicate not only causal relations but also causes neither of which are themselves perceptions. I assume that here again Hume was simply using the language of traditional philosophy, but the language itself might have suggested to him a flaw in the general theory of empiricism. If it were possible to find all our objects of knowledge in perceptions, as Hume uses that term, then there would be no need to explain the origin of any of them, for they would contain within themselves all the information which we require. Again, we have, let us say, a complex impression which we call "water." This may "make us perceive" thirst and pleasure, which are presumably impressions of reflection, but the causal efficacy involved is either not itself perceived or is simply that constant conjunction of impressions and ideas which Hume had previously called not an affair of chance. But he knows that when we see water we are not necessarily thirsty or pleased, so that the conjunction is far from constant. We are not here objecting to his account of how impressions of reflection are aroused in us; it may well be true. But it is not harmonious with Hume's method in general. Nor is it harmonious with any empiricism which assumes that the objects which we know are simply sensory qualities which have neither transcendent reference to something other than themselves nor any relative or "respective" properties.

In any event, Hume has established to his own satisfaction that in order to study human nature we must first understand ideas, rather than impressions, since they are the source of our impressions of reflection. But as soon as he begins this inquiry, he has to modify to some extent the meaning of the term "experience." He now includes in it what he himself has observed about perceptions and what could never be found either in a single perception or in a set of them seen together. He can be excused for this, for unless he had wished to conclude his book at Chapter One, the rest of it would have been merely a repetition of that chapter. Consequently he proceeds to tell his readers some of the conclusions he has reached from a study of memory and imagination, one of which is that the ideas of the former are usually more vivid than those of the latter. The original impressions which we remember come from sensation, but "their ultimate cause is, in my opinion, perfectly inexplicable by human reason, and it will always be impossible to decide with certainty, whether they arise immediately from the object, or are produced by the creative power of the mind, or are derived from the Author of our being" (*ed. cit.,* Bk. I, Part III, sec. 5). Their origin, moreover, is of no importance, he says, since we may infer from the coherence of our perceptions whether they are true or false. Here he is back again at his original point of view. He is so consistent that he is willing to decide that the difference between imagined and remembered ideas is simply their forcefulness, since we have no means of comparing one of them with the impression which was its original. We are thus reduced to relying on the vividness of what we remember and that vividness is belief or assent. Our belief in an idea which comes from memory or imagination is not the result of comparing it with the impression from which it arose, but is nothing more than a feeling. And this is all it could be if memory is memory of perceptions. Memory can preserve the original order of ideas but not the impressions from which they arise. Imagination can mix them up and rearrange them in any order it pleases. But could any individual by himself know whether his ideas were mixed up or preserved in the order in which their correspondent impressions arose? Only, it would seem, by having that order preserved as a standard of comparison.

At this point Hume is forced to introduce a fourth premise.

4. The equation of intelligibility and regularity. This arises when he is discussing the problem of the association of ideas. Chance for him is equated with disorder; intelligibility with order. In his own words, "As all simple ideas may be separated by the imagination, and may be united again in what form it pleases, nothing would be more unaccountable than the operations of that faculty, were it not guided by some universal principles, which render it, in some measure, uniform with itself in all times and places" (*ed. cit.,* Bk. I, Part I, sec. 4). One might paraphrase this as the uniformity of nature, if one wishes, for the outcome would be the same. Behind it lies the assumption which we have indicated in connection with other philosophers, that regularity requires no explanation but *is* an explanation. The intellectual problem consists in first noting irregularities among things and events and then finding some order or regularity in their occurrence. Just what order is, we shall omit discussing. But roughly for Hume it consists in repetition. The repetition in his writings is that of similars, contiguities both spatial and temporal, and causes and effects. This is not unlike Locke's theory of the association of ideas and implies simply that a given idea when it arises will induce the rise of another idea which is either similar to it, or which in previous experience was closely connected with it in position or in date, or which is the cause or effect of it. In Locke these principles are used to criticize human beings who rely on such associated ideas to build up theories. But in Hume they are the very "principles of union or cohesion among our simple ideas." These principles of union and cohesion are the source of our ideas of substance; it is they from which we derive the notion that besides the observed qualities of sensation—impressions—there are things which have these qualities. The idea of substance is "nothing but a collection of simple ideas, that are united by the imagination, and have a particular name assigned them, by which we are able to recall . . . that collection" (*ibid.,* sec. 6). A thing then is simply a set of ideas associated by the laws of the association of ideas. Similarly abstract ideas are nothing but particulars associated together and "annexed to a certain term" which extends their denotation and moreover recalls to our minds

similar individuals.[30] Nevertheless Hume does not deny that such ideas may represent generalities. What representation consists in is clear enough; it is suggestion. The so-called general idea of a triangle simply suggests to us all sorts of triangles, the ideas of which are individuals, and, by comparing certain inferences which we may have drawn from the first idea with the ideas recalled to us by suggestion, we can see whether that inference is true or false of the whole set. The idea is particular in its nature but general in its representation. Hume is well aware of the difficulty here but he attributes it to the "ultimate causes of our mental actions" into which he refuses to investigate. He recognizes our ability to extend the signification of our ideas as far as we wish, but refuses to ask why we do so. One must agree that his refusal is legitimate, given the problem to which he is addressing himself. But the greater question is that of why, if our knowledge is confined to impressions and ideas, there should ever arise the need for such extension. Common sense—or simply language in which common nouns and adjectives occur—shows him that we do use general ideas. Nor does he object to their use. But they cannot, since everything in nature is particular, refer to a single impression or single group of impressions. Therefore he is forced to introduce the theory of representation. It is clear that the idea of a triangle is more than a suggestion of a random collection of other ideas, some of big, some of little, some of scalene, some of equilateral, some of right, some of isosceles figures. For it does not include some of the features of those figures supposedly named by it. Hume permits us to separate out of a collection of ideas certain of their features, for if an idea is complex there is no reason why it should not be broken down into its parts. But the question is why certain features should be separated out and certain others retained. The answer to this difficult question does not demand an inquiry into the ultimate nature of the soul or mind or anything else. One has simply to ask what uses we are to make of the general idea so formed. One might as well start with a very general idea, such as that of a three-sided plane figure, and then by the use of the imagination see that some of these might have three equal sides, some two, some none. And this could presumably be done by utilizing our powers of reasoning. But, if that were so, then an argument would be given to the Platonists which would fortify their theory that the general idea was prior to the particular. There are so many classifications which might be made of particulars as they occur to our experience that one wonders why some are never made. No one, to the best of my knowledge, has ever attempted to classify triangles according to their color or according to the height of their longest side in inches. No one has ever formed a general idea that would represent the things named by the geometric triangle, the erotic triangle, or the musical instrument called a triangle, though they all have a common characteristic. Hume agrees that there is such a thing as the human mind with interests, passions, emotions, ambitions, and the like. But since he wishes to construct all mental content out of sensory impressions, and since he cannot grant to the products of sensation properties which were not previously in sensation, he is consistent enough to reinterpret the general ideas in terms of his premises.

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[30] This is attributed to Berkeley and is called by Hume "one of the greatest and most valuable discoveries that has been made of late years in the republic of letters." (*Ibid.*, sec. 7.)

The two relations of identity and causality still remained to plague an empiricist of Hume's type. It will be recalled that, according to Berkeley, the mind or soul was held to be identical throughout time, and the ideas in the mind of God caused the ideas which we ourselves enjoyed. Hume opens the third part of his *Treatise* with a list of relationships which we habitually use in building up knowledge of which some can and some cannot be found in the objects of knowledge, that is, in impressions and ideas. Those that can be so discovered are resemblance, contrariety, degrees in quality, and proportions in quality or number. Resemblance and contrariety are seen immediately through inspection, as is degree of any quality. He means by this that no reasoning is required to know that two colors are alike or unlike, fainter or more intense. The relation of degrees of quality is also perceived at once when the difference is great, but when it is small there may be some difficulty in appreciating it exactly. Since these four relations can be intuited, it remains to examine the other three: identity, position in space and time, and causation.

Hume's technique in analyzing an idea is naturally to discover from what impression it might arise. The idea of causation, he discovers, can be broken down into the contiguity of impressions and succession in time. In ordinary language this becomes the statement that the cause and effect must either be contiguous themselves or linked together by other contiguous events. Thus something which happened a hundred years ago could be the cause of something occurring now only if between it and its supposed effect there could be found a series of events which themselves stood in the relation of cause and effect. The second characteristic of causes simply means that causes must always precede their effects—which of course eliminates the idea of final causes or teleology. The notion, then, that the cause produces the effect or that the effect necessarily follows from the cause must be further examined. The former notion is illegitimate. Here Hume reproduces Malebranche's critique of causation. "Motion in one body is regarded upon impulse as the cause of motion in another. When we consider these objects with the utmost attention, we find only that the one body approaches the other; and that the motion of it precedes that of the other but without any sensible interval. . . . Should any one leave this instance, and pretend to define a cause, by saying it is something productive of another, it is evident he would say nothing. For what does he mean by *production?*" (*Ed. cit.,* Part III, sec. 2.) Hume is confident that no one will be able to produce the required impression, which will be that of production. And if no such impression can be offered that is different from the impression of contiguity, then the idea of production must be meaningless.

But Hume admits that we read into the ideas of contiguity and succession the further idea of necessary connection. Necessary connection is applied to two situations: the necessity of every effect having a prior cause, and that of every cause necessarily having a certain effect. But necessity is not involved in any of the four ideas which he believes to be intuitive, for each of them is distinct from the others and none of them implies more than is plainly evident in them. If we see that two colors are similar or dissimilar or more or less intense than another or more or less extended than another, we do not at the same time see that they are necessarily so. And if we observe that something happens before or after something else, we do not at the same time see that it necessarily happens so. The idea of necessity, it must be concluded, is something added legitimately or illegitimately to the impressions of contiguous succession. If this eliminates the idea of causation, so much the worse for the idea. It is in vain that philosophers argue that if the idea is illegitimate then things would be self-caused, or that nothing would be the cause of a given effect. Hume's retort is that if we reject the whole idea of productive and necessary causes, then we must do it wholeheartedly and not reintroduce the idea in an occult manner for purposes of criticism. All he is attempting is the reduction of this idea to an impression or set of impressions, and he finds that the attempt is futile.[31]

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[31] A lesson is to be learned from Hume by all philosophers who attempt to build up arguments from the meaning of words. Witness the following: "They are still more frivolous who say, that every effect must have a cause, because it is implied in the very idea of effect. Every effect necessarily presupposes a cause; effect being a relative term, of which cause is the correlative. But this does not prove that every being must be preceded by a cause; no more than it follows, because every husband must have a

Yet the idea of necessary connection is so strong that Hume, though he thinks that he has demolished the idea of causation as ordinarily interpreted, proceeds to give us the cause of this idea. Since every impression and idea is a separate individual object of perception, there is no way of reasoning from one to the other. But by the laws of the association of ideas, we can see that when two ideas or impressions are constantly associated, the occurrence of one will evoke the other. Only psychology can explain our feeling of necessity, since logic is impotent to do so. The psychologist will agree that the constant repetition of certain experiences will give rise to the added feeling of necessity. In defense of Hume it must be pointed out that one of the most striking effects of habit is the feeling that the habitual is coercive and that what one does habitually has to be done. It is no answer to Hume to say that the habitual actually is not necessary, that because, for instance, we have the habit of beginning the day with a cup of coffee, days must be begun with cups of coffee. People who do not know that Englishmen, for instance, begin the day with a cup of tea, will fail to see the force of the argument. And the only way we have of learning that our habits and customs, which are collective habits, are not necessary laws of nature, is by discovering people and places where they do not obtain. Thus Hume, if his psychology is correct, has succeeded in explaining the feeling of necessity which we project into the idea of causal connection. Whether he should have attempted to explain anything after having, as he thought, done away with causation is another matter. But his excuse is that the idea of cause does have the added property of necessity and, since necessity cannot be founded on any impression, it is his task to indicate what its source is. His conclusion that it is "nothing but an internal impression of the mind, or a determination to carry our thoughts from one object to the other" (*ibid.,* sec. 14), throws part of the burden of constructing a set of inferences back into the human mind, and that part is the structure of a scientific theory. This does not imply in any sense of the word that we are free to set up any sort of structure which we please and that our theories need not correspond to fact. On the contrary, though the idea of necessity is not founded on any single impression, it is founded on the constant recurrence of sets of impressions. That recurrence is not a figment of our imagination; we may see it with our eyes and see it with precision. Hume here is clearly anticipating Kant's notion that necessity is one of the categories of the

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wife, that therefore every man must be married. The true state of the question is, whether every object which begins to exist, must owe its existence to a cause; and this I assert neither to be intuitively nor demonstratively certain" (*ibid.*).

understanding, but unlike Kant he attributes it to the psychology of habit, not to the inherent behavior of the intellect. The outcome of Hume's critique of the idea of causation is his famous definition of a cause: "A *cause* is an object precedent and contiguous to another, and so united with it that the idea of the one determines the mind to form the idea of the other, and the impression of the one to form a more lively idea of the other" (*ibid.*).

This, once accepted, in itself refutes Berkeley's theory that the ideas in the mind of God are the causes of our ideas. For the causal relation can subsist only between impressions and ideas, and the ideas in the mind of God are not the direct objects of our experience. It also eliminates the possibility of explaining any event through unobservable causes and hence prepares the way for positivism, both of Comte's type and of that of the logical positivists. It does not remove the possibility of constructing large sets of constant relationships and organizing them into logical systems. But explanation turns into the noting of constant associations and by extension of noting their occurrence under varying circumstances. Hume's scepticism, as far as causation is concerned, is directed toward explanation through what he called ultimate causes.

We are now still left with Berkeley's perceiving subject which has or experiences the perceptions. Hume's critique of the idea of personal identity proceeds in the same manner as did his critique of causality. He must inquire whether the idea does and can correspond to any impression.

The idea of the self is that of something which has identity in time and simplicity. If every idea must arise from some impression, then so must the idea of the self. "But self or person is not any one impression, but that to which our several impressions and ideas are supposed to have a reference" (*ibid.,* Part IV, sec. 6). Furthermore, the impression in question would have to be always the same throughout our lives. "But there is no impression constant and invariable. Pain and pleasure, grief and joy, passions and sensations succeed each other, and never all exist at the same time" (*ibid.*). Nothing is constant, as introspection will show, and hence there is no idea of self. Not only could there be no impression corresponding to something permanent and self-identical, but actually when one turns one's eyes inward, one sees nothing but impressions and ideas. "For my part, when I enter most intimately into what I call *myself,* I always stumble on some particular perception or other, of heat or cold, light or shade, love or hatred, pain or pleasure. I never can catch *myself* at any time without a perception, and never can observe anything but the perception" (*ibid.*). In other words, neither is there a theoretical possibility of such an idea nor does Hume himself find one within him. The idea of self is not explicable on Hume's principles and, since he naturally believes in his principles, he gives up the idea of self. But though he accepts his conclusions in philosophy, he admits that when he is not philosophizing he acts like other men, talking of causes and selves. His concern with philosophic criticism arises from his desire to see what are the foundations of knowledge and belief, and he is candid in admitting that his philosophic interests spring from his desire for pleasure. Few philosophers have been so frank.

The extension of Hume's method into psychology and ethics we shall leave to whoever may be curious about them, assuring them that they will find the same acuity of judgment and consistency of logic there as in epistemology. But it was his epistemology which became integrated into the history of philosophy, not his ethical and aesthetic theories, and hence we shall forego the pleasure of pursuing the matter beyond that field. Hume is the culmination of the so-called empirical tradition, according to which experience is whatever we perceive. We have seen this tradition sharpening its focus step by step until in Hume it could scarcely go farther. It should never be forgotten that he did not deny the existence of ultimate causes and inner natures; he simply said that the frontiers of knowledge stopped this side of them. The next step in this tradition was to re-examine the act of perceiving and to see whether Hume's investigation was sufficient. That step was taken by the Scottish Realists, whose philosophy will be discussed in a later chapter. We shall now turn to the anti-empiricists, commonly known as Platonists.

CHAPTER 7

The Idealist Tradition in England

THE philosophies which we have been discussing under the heading of empiricism tried to recontruct the contents of knowledge, and sometimes the human mind itself, out of the contribution of sensation. This followed, on the one hand, the lead of Aristotle's dictum that there is nothing in the intellect which was not previously in sensation and, on the other, that of Democritus that only certain physical things exist in nature, as distinguished from the ideas caused by them. The Democritean principle in the seventeenth century was given a precise meaning by Galileo: only those properties which are sufficient and necessary for building a theory of dynamics are "real"; all others are added to reality. Among these others are not only the ordinary sensory qualities of colors, sounds, and the like, but also whatever is named by general, abstract terms and the framework itself of knowledge, what Kant was to call its form. The sensory qualities were, in general, explained either as effects made upon us by physical objects or as effects similarly produced by ideas in the mind of God. Whatever their primordial source, they turned into our contribution to the natural world and, if the human race were to disappear, these qualities would disappear with it. In Hume these sources of ideas, for they were called ideas, were unknown and unknowable. But that they must exist somehow and somewhere, Hume never denied. To such philosophers the existence of general ideas, as well as the structure of knowledge, became a problem; especially since all of them, at least in England, were convinced that ideas were particular beings which might point to or represent, in Hume's terminology, the abstract ideas. As for the form of knowledge, that admittedly was not absorbed from sensation, since sensory data came into the mind individually and unorganized. The construction of groups of them into things, and the construction of things into patterns of occurrence from which general natural laws might be drawn off, was at least in Locke a creative act of the mind, which for reasons which he did not expound seemed to give us some clue to the real organization of the external world. But almost everyone believed that we had certain ideas, such as those of Revelation and of mathematics, which did not come to us from experience defined as sensory. Both were believed to be not only certain but the most certain parts of our knowledge. No one could deny that the ideas of Revelation did not arise from sensation; some, like Berkeley, maintained that mathematics did. But the laws of logic, which were incorporated into mathematical thinking, were either known intuitively or were simply the ways in which we inevitably thought when we did any thinking. The question therefore of the nature of knowledge could still be argued, as if the empiricists had by no means proved their point. The opposing tradition I have called Platonistic, since many of its adherents were directly inspired by Plato or his disciples, though the term, like most doctrinal names in the history of philosophy, is far from accurate.

1. Lord Herbert of Cherbury

The first member of this school whom we shall discuss is Lord Herbert of Cherbury (1583–1648), a younger contemporary of Bacon and of about the same generation as Hobbes. As famous for his influence on Deism as for his contributions to epistemology, he has certainly been too neglected by historians of philosophy. The work that is of interest to us was entitled "On Truth, in Distinction from Revelation, Probability, Possibility, and Error," and appeared in its first edition in Paris in 1624 and in its third in London in 1645, both editions being in Latin.[1]

Herbert, like so many of the seventeenth-century philosophers whom we have been discussing, was troubled by the disagreements common to men who all seemed to be in the pursuit of truth. He believed that a single and universal set of ideas could be found which would be true for mankind in general, that there was such a thing as *The Truth,* and that men were not forced to be satisfied with a variety of personal interpretations of the laws of nature. What might be called the lyrical element in philosophy was rejected by him, as it is by most scientists. One ought to be able to discover some road that would lead one out of the morass of conflicting opinions to a field in which all would be in agreement. Whereas Bacon had maintained that the experimental method would reach this result, Herbert insisted that only a full knowledge of what truth consisted in would do so. Neither scepticism nor the division of the mind's truths into those held by reason and those held by faith would suffice. That man can attain to some truth he accepts as an axiom, for he cannot believe that God would have created man as His image and yet doomed him to err. But truth itself can be found in four areas of man's experience. (1) There is a truth of things. This appears in statements concerning existence or nonexistence, reality and unreality. It is the truth of facts. It is revealed to us by the presence of the thing about which we are making a judgment. (2) There is a truth of appearances. This arises, or may arise, when we are distinguishing the way things appear from the way they are. Yet, even when we confine ourselves to appearances, we may tell the truth about them. We are frequently deceived by appearances, but nevertheless we are not always deceived by them. The conditions under which we may reach the truth about them can be known and analyzed, and consequently we can, at least in theory, prevent ourselves from being misled by appearances and taking them for reality. (3) There is a truth of concepts. This truth recognizes the distinctions of classes of things, and the interrelations of species and genera, the place of an individual in a class. It is not, like the two former kinds of truth, dependent upon experience at all. It "belongs entirely to us" (*ed. cit.*, p. 86, par. 6). Since we are all individuals with prejudices or sense organs of varying degrees of acuity, the truth of concepts requires correction and the corrections are made by (4) the truth of intellect. The intellect "alone is able to decide in virtue of its inborn capacity or its Common Notions whether our subjective faculties have exercised their perceptions well or ill" (*ibid.*). Truth of the intellect requires not only knowledge of the preceding three truths, but also the organization of them into a consistent system, a consistency which Herbert calls conformity with the faculties, external and internal. This means that though there are four kinds of truth, there is a common truth which unites them all, which arises, as it were, out of a purgation of each of those elements which would prove an obstacle to their union. Conformity is a concept of which Herbert makes much use. He uses it to describe the uniform character of individual things through time, believing apparently that each thing, in spite of occasional variations, has a nature which does not change. Truth of things expresses that uniform nature. Truth of appearance "consists in the conditional conformity with the thing," so that whatever appears to be true of a thing will be only apparently true if it is not consistent with statements that are always true of the thing. Thus, if something now is red, now blue, now green, these colors are not part of the thing's constant nature and any descriptions of the thing in terms of its color have only the truth of appearance. The truth of concepts is also conditional, but resides in conformity between "our subjective faculties and the thing as it appears" (*ibid.*, p. 88, par. 7). Our subjective faculties involved here are our powers of classification, and it is clear that for Herbert a classification may be made either on the basis of apparent or real similarities. The truth of intellect occurs when the three other truths are made to conform to one another, and this seems to be brought about by the intellect itself. We shall now see how much the mind itself contributes to knowledge of the truth.

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[1] I shall quote from the translation by Meyrick H. Carré (Bristol, England), n.d.

The faculties by which we obtain knowledge are four in number. They are called by Herbert *Natural Instinct,* which gives us common notions; *Internal Apprehension,* which is analogous to Locke's ideas of reflection; *External Apprehension,* or what is more commonly called sensory perception; and *Discursive Thought,* or reasoning (*ibid.*, ch. v, p. 115). It will appear, before Herbert has concluded his investigation, that they are arranged in order of decreasing reliability.

Natural Instinct is found in us all, and its objects are affirmed by common consent. "Whatever is believed by universal assent must be true," he says (*ibid.*, p. 116). Natural Instinct is the one faculty which cannot vary from man to man. It reveals to us those Common Notions which the human mind as human must employ in knowing. It is analogous to the common natures and habits of the animals and plants which all after their kinds preserve precisely similar habits of growth, appetite, and form. Herbert cannot believe that mankind is the only group of creatures which God has made heterogeneous. They must have somewhere within them a unifying principle which makes them all men and not simply this and that man. He realizes that we all show a large extent of diversity, but within the diversities of tastes, judgments, habits, and customs, there are some things upon which we are all agreed, and these he calls the Common Notions. This term, which was taken over from the Stoics, denotes man's differentia more than reason does. And whether one agrees or not with Herbert's list of Common Notions, his argument for their existence is not to be lightly rejected. The two Common Notions which he cites are religion and law and though he admits that there are various religions and various laws, he insists that all peoples have some religion and some idea of law. Hence to point out that the religion of one tribe is monotheistic and of another polytheistic would not be a disproof of his thesis, unless one could further demonstrate that one or the other was not really religion. Similarly to point out that one tribe permits polygamy and another forbids it does not in itself prove that both tribes do not have an idea of law. The problem, according to Herbert, is to discover as far as possible just what the Common Notions are, the primordial ideas shared by all mankind, and on them to erect a universal religion and a universal law. That under the heading of religion one might find some beliefs which were in absolute contradiction with all the other beliefs, so that one religion completely negated the other, does not seem likely to him, since he firmly believes that men could not be so at variance with one another and still be men.

Natural Instinct is given to us by God and is His instrument. But as we see it in operation, it is the expression of those faculties which are found in every normal man, "through which the Common Notions touching the internal conformity of things, such as the cause, means and purpose of things, the good, bad, beautiful, pleasing, etc., especially those Notions which tend towards the preservation of the individual, of species, of kinds, and of the universe, are brought into conformity independently of discursive thought" (*ibid.,* p. 122). There are several details of this description which should be emphasized. One is that the principles of explanation are Common Notions. The next is that ethical and aesthetic terms are Common Notions. The third is that the Common Notions maintain the order and stability of the Cosmos, the Stoics' Great Animal, as animal instinct is supposed to make for the beasts' preservation. Finally, discursive thought, reasoning, has no part to play in the operations of Natural Instinct. We use certain Common Notions instinctively, as birds migrate or build nests. The Natural Instincts, then, are an expression in action of our humanity. The Common Notions are "inscribed within us" by Nature. "No one, however wild his views, imagines that they are conveyed by objects themselves" (*ibid.,* p. 126). They are "not so much the outcome of experience as principles without which we should have no experience at all" (*ibid.,* p. 132).[2] This is what is meant by calling the Common Notions innate. Locke must have been a very careless reader of Herbert when he attacked him as he did, for Herbert was insistent that the Common Notions, though latent in all, appeared overtly not in children and madmen but only in normal people. Because the Natural Instinct is part and parcel of our human nature, it is prior not only to experience, in the Lockean sense of that term, but also to reasoning. For the laws of thought are part of our Common Notions and determine the course of correct reasoning. Finally all Common Notions are absolutely prior to and independent of evidence, and are universal, certain, and necessary.

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[2] The Kantian turn of this phrase is not accidental. See A. O. Lovejoy, "Kant and the English Platonists," in *Essays . . . in Honor of William James,* 1908, pp. 265–302.

Against any form of empiricism Herbert is arguing that the structure of knowledge is determined by the mind itself and not by its objects. This structure may be expressed in a series of statements which are incontrovertibly true and in accordance with which all true knowledge will ultimately be tested. But next in order of certainty comes the knowledge which we derive from the internal senses. Just as Natural Instinct seems to be analogous to the whole order of nature, so internal senses seem to be found in living beings which have no sense organs, the corals and shellfish being cited as examples (Carré ed., ch. vi). The examples of internal sense which Herbert gives are love, hope, and conscience, which he maintains are as universal as the Common Notions. Yet they differ from them in that they are directed to particular objects. We do not simply love; we love individuals. Hence the truth which comes from internal sense may be either general or particular. But they do not emerge out of the contemplation of general or particular objects. On the contrary, we direct them to the objects in question and thus we have some power over what is presented to us in experience. In that way we are able to make our whole inner life a harmony in accordance with the Common Notions (*ibid.,* p. 155). It is through this harmony that we reach blessedness, for through it we approach the condition of God's harmonious nature. There is a noticeable similarity here between the views of Herbert and Spinoza in that both men agreed that happiness was the fulfillment of our eternal nature and that it could be reached only through an awareness of the absolutely true. "We must not imagine," says Herbert (*ibid.,* p. 157), "we have reached the summit of perfection until we are genuinely filled with devotion and honor towards the divine justice; until we prefer to be chastised rather than evade the destiny He has prepared for us." The end of life for both is to live in accordance with God and Nature, and for both there is a possible agreement between our nature and that of God. Spinoza, to be sure, differs from Herbert in more ways than he agrees with him. But oddly enough the Stoic strain which is in both emerges at times to make the resemblance seem greater than the difference.

The external senses are those which put us in contact with the external world. But they are not simply recipients of material impressions; nor are our sensations simply "modifications" of the soul produced in us by external causes. On the contrary, by analogy with the process of cosmic emanation, according to which the cosmic hierarchy flows out of God's being as light issues from a candle, so the lower orders of knowledge proceed from the higher. Herbert never loses sight of his basic method, which is to derive all knowledge from the mind's own activity as far as possible. It is for that reason that he can say, when speaking of the external senses, "We possess . . . a vague premonition, which anticipates the actual realisation of perception" (*ibid.*, ch. vii, p. 208). We do not clearly know what we are going to see or hear, but we do suspect it as the internal sense in company with Natural Instinct prepares to guide and form our perceptions. The expression "the actual realisation of perception" must be taken literally. Perception is potentially in the mind; it is latent, waiting only to be actualized. The physical object which we may be observing is only the occasion of its actualization. He is so convinced of this that he abandons the traditional theory of the five senses (*ibid.*, p. 209), maintaining on the contrary that there are as many senses as there are differences between objects. Strange as this may seem to us who are accustomed to what might be called a receptive theory of sensation, it is no stranger than our belief that a nerve current explodes into a sensory quality when it reaches an appropriate area of the cortex. There is a discontinuity between the psychic event and the nervous event that is presumably its cause. I am not saying that the customary theory is incorrect, for that would be presumptuous. But Herbert's theory that our souls on certain occasions produce perceptions is no less logical. For if the percept is itself psychical and we know what we mean by "psychical," the puzzling discontinuity has been eliminated, though the duality of mind and body has not. Unfortunately, when Herbert comes to the point of explaining how the perception becomes actualized on the occasion of meeting an external object, he can produce merely the idea of conformity. So Leibniz, though with more candor, was to produce his concept of preestablished harmony when he met a similar problem. If it be assumed that Herbert was forced to maintain that external sense could never err, since the perceptive faculty would always be actualized in the same way on identical occasions, it must not be forgotten that no knowledge would be had at all unless the internal sense and Natural Instinct were operating along with external sense. And since we are free to follow the guidance of our Common Notions as we will, so we are free to err in ordinary sensory experience. The perceiver, if he "leaves the high road and wanders among by-paths . . . must return to the Common Notions which are alone able to correct his mistakes. The external modes of experience are completely trustworthy when their proper conditions are present; when they are absent, truth itself is in default. For of what use is the eye when light, or appropriate distance or span of time are absent? We are free within ourselves to shut our eyes, stop up our ears, so long as all the conditions are present. It is the same with the Common Notions. Freedom reigns supreme within us, finding constraint only at one point, namely, in that it is compelled always to pursue its eternal happiness; though it may do so foolishly and sometimes in vain" (*ibid.,* p. 231).

Discursive Thought, the fourth of our cognitive faculties, is the most subject to error. It is superfluous when we have Common Notions or when the internal or external senses are testifying. Moreover, it is the least disciplined of our faculties. Through its exercise men have been given over to wild theories, the fruit of which can never be anything other than evil. It sets itself above the Common Notions. Herbert's eloquence when he inveighs against it is that of the great moralists. Nevertheless he has to grant that when we cannot find any better means of reaching the truth, we are reduced to its exercise. Without it we cannot draw inferences nor connect general statements together (*ibid.,* p. 235). Moreover, it spots contradictions in terms and distinguishes the Common Notions. Its special province is analogy between things. But when it attempts to rise beyond the world of things, it is helpless without Common Notions. It is not the instrument of philosophy proper, since for Herbert that discipline can succeed by Natural Instinct alone. It can, however, develop logic whose purpose is the untangling of the Common Notions from "the cloud of words" (*ibid.,* p. 238). Otherwise we would do well to reduce it to its own narrow province and never let it escape. For "every important error is due to it" (*ibid.,* p. 239).

There lies behind all this a mass of presuppositions which are probably the chief justification for calling this epistemology Platonistic. They are (1) the idea that knowledge is essentially contemplation, rather than action; (2) that there is a correspondence between all parts of the universe and the universe as a whole; (3) that the technique of philosophy is the uncovering of that correspondence; (4) that truth may be discovered through the consistency between ideas and the Common Notions; (5) that on the analogy of emanation, reality is the ideal from which all else proceeds; (6) that sensory experience is the occasion for the actualization of perception rather than its cause; (7) that the Natural Instinct reveals the true nature of mankind. On the other hand, there are certain Platonistic ideas which are not present in Herbert. (1) He says nothing about the theory of reminiscence, according to which we recall the knowledge which we had before birth on certain occasions. (2) If he suspects that we are reincarnated in other bodies, he does not say so. (3) There is little if any echo of the more famous Platonic myths, such as that of the Charioteer in the *Phaedrus* or that of Eros in the *Symposium* or that of the Cave in the *Republic.* (4) There is no mention of an intelligible world as distinct from a sensible world. In fact, he shows a closer resemblance to the Stoics than to the Platonists in his acceptance of the idea of common notions which are found in universal assent, in his belief that human happiness arrives when an individual lives in harmony with cosmic law, and in his religious doctrines, upon which we did not touch.

2. Henry More and Cudworth

The second generation of Platonists were largely men connected with Cambridge, and from them the misnomer "Cambridge Platonists" has come to be used for the tradition in general. Of this group we shall deal in detail only with Henry More (1614–87) and his friend Ralph Cudworth (1617–88), considering especially their contribution to epistemology and ethics respectively.[3]

More's early interest in philosophy seems to have been stimulated by Descartes. But Descartes' psychophysical dualism left him unsatisfied, though he never denied a difference between the two substances. Yet, in order to make interaction between mind and body more plausible, he attempted to reduce that difference to what one can only call a difference of degree rather than of kind. This, it will be seen, was also the ambition of Leibniz, but both men failed to see that the two ends of a scale are still two and not one. It has been popular to believe that the difference between sanity and insanity is also only one of degree, but nevertheless those who are on one end of the scale cannot function in a world inhabited by those on the other, cannot understand their reasoning processes, and must undergo a course of therapeutic treatment before they can move comfortably in the society of the other. More's material world is not to be described in purely mechanical terms and is indeed permeated with a "plastic spirit" which determines its behavior. But nevertheless it is not a mind or a set of ideas or "spiritual" in the sense that the human soul is supposed to be spiritual.

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[3] John Smith (1618–52), Nathaniel Culverwel (d. *ca.* 1650), and Peter Sterry (d. 1672) will have to be omitted in spite of the interest of their writings.

It would probably be best to begin with a description of what More means by "spiritual." In his *Antidote against Atheism* [4] (Bk. I, ch. iv., 3) he lists those qualities which distinguish spirit from matter as follows: self-penetration, self-motion, self-contraction and dilatation, indivisibility, to which are added the power of penetrating, moving, and altering matter. In the *True Notion of a Spirit* (*ibid.*, sec. 18), a spirit is defined as "an immaterial substance intrinsically endued with life and the faculty of motion." Out of this definition it appears to More to follow that spirit alone has true *unity,* by which he means that it cannot be dissected, cut up into parts which are externally related to one another; it is a unity which is not formed by addition. We shall see this sort of unity emphasized repeatedly among idealistic philosophers and some others, like Bergson, whose views are similar to those of the idealists. Along with unity goes *goodness,* by which More suggests that spirit is oriented toward an end or purpose and that its nature cannot be understood in a nonteleological fashion. If one prefers, it could be said that spirit alone can determine values. In the third place spirit is *true,* by which More means simply that it retains its self-identity through time. Besides these traits, spirit also exists in time and place and is extended, three characteristics which were traditionally reserved for matter but which More emphasizes because he wishes to oppose the Cartesian idea of the soul as inextended substance. Its substantial nature is accentuated by More since he wishes to prevent anyone's believing that it may be a property of anything else, such as the body, thus eliminating such views as those which Hobbes was propounding. And in spite of its extension, "yet it is utterly *Indivisible* and *Indiscerptible* into real Physical parts. . . . It can *penetrate* the *Matter,* and . . . penetrate things of its own kind; . . . It is understood to have *Life* intrinsically in *it self,* and the faculty of *moving;* which in some sense is true in all Spirits whatsoever, forasmuch as *Life* is either *Vegetative, Sensitive,* or *Intellectual* . . . Every Spirit either moves it self by it self, or the Matter, or both" (*ibid.,* sec. 18).

Whereas most of these traits were commonly accepted by men who believed in the reality of souls or spirits, there is one which was commonly denied, extension. We have already seen the trouble which Descartes faced in making the soul inextended and yet placing it in the pineal gland where it could immediately act upon the animal spirits. More clearly saw that difficulty and avoided it by his theory of extended spirits. They do not occupy much space, to be sure, for their extension may be simply position, but that they occupy space and are, as he says, *somewhere,* does not entail materiality. Spirits can expand and contract apparently at will (*ibid.,* sec. 22), and all that is required to grant them extension is an *Ubi.* That extension does not entail materiality is demonstrated ingeniously by More when he points out that even if all the matter were removed from the universe, space would remain and such space could be neither divided into parts nor be imagined as objects material and sensible are imagined. That our idea of space can be analyzed logically, he is far from denying, but he is violently opposed to the notion that corresponding to these logical parts or dimensions there are physical parts. Our trouble comes from our imagination, which is so infected with the dregs of the material world that it always tends to think of things in materialistic terms. An example of this weakness, which he does not cite, it goes without saying, would be the use of mechanical models in subatomic physics. Another example would be metaphors drawn from the behavior of fluids which we use to describe energy systems. If we could only think of extension as dimension without matter, then we would have no difficulty in accepting the idea of extended spirits.

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[4] First published in 1652. The most accessible edition of More is that of Flora Isabel Mackinnon, *Philosophical Writings of Henry More* (New York: Oxford University Press, 1925), which I quote unless otherwise indicated.

To deny to matter the exclusive right to extension was to diminish the difference between matter and spirit, for it gave all reality at least one common property. Most of the properties of spirit are the polar antitheses of those of matter but this one is that *sine qua non* in More's mind of real existence. It permits him to locate things in the mind and not to think of them as simply presented to the mind. And it also permits him in a curious way to insist that the mind is not a *tabula rasa* until the material world through sensation makes certain impressions upon it. The mind at birth has what he calls "an active sagacity" or "quick recollection" which operates on the occasions of its various experiences and formulates its knowledge. The mind is "jogged and awakened by the impulses of outward Objects" (*ed. cit., Antidote,* I, ch. v, 3) to a fuller understanding of what is before it. This, as is clear, is what Lord Herbert referred to when he spoke of the action of the common notions in perception. That there is actual knowledge in the soul prior to experience is shown by our mathematical ideas (*ibid.,* ch. vi). When we are shown a circle drawn on paper, that circle itself is clearly not a perfect mathematical circle, but nevertheless it can represent one to the mind and, when the mind sees it, it can recall all the geometrical properties of circularity. The mathematical circle, he argues, could not come into the mind from the material circle which is drawn on paper for the very reason that it is not out there in it. On the contrary the material circle can be only a hint, a reminder, of what the mind already knows and what it pronounces on the occasion of seeing it. "The Soul sings out the whole Song upon the first hint, as knowing it very well before" (*ibid.,* ch. vi, 2). This, as readers of Plato will recognize, is derived from the *Meno* in which the slave solves geometrical theorems though he has studied no geometry. Besides certain mathematical ideas the soul also possesses innately relative notions. These notions are those of cause and effect, whole and part, like and unlike. More's technique here is to try to show that there can be no material counterpart to relatives, and that consequently their source must be psychic. There can be no material counterpart to such notions since they are not sensory qualities, like colors and sounds. They cannot be sensory qualities since they may change when the terms by which they are related are not changed. Two similar things can become dissimilar merely by changing one of them, and the dissimilarity is no more in the changed one than in the unchanged. If the former innate idea is based on the argument in Plato's *Meno,* this comes from the *Theaetetus.* But the argument for the subjectivity of ideas of relations is furthered by More's pointing out that some relations may be changed with no change whatsoever in the terms. For a given physical object may sustain contradictory relations to two different other objects, being, for instance, half of one and twice the other. The relation therefore, he concludes (*ibid.,* 5), cannot be inherent in the material properties themselves. There are also some complex ideas which he believes to be innate: axioms of arithmetic and geometry, which are known immediately to be true. An example would be: Things equal to the same thing are equal to each other, or the Law of Contradiction. Such truths arise in all minds that reason at all and arise with no object in the external world corresponding to them. They are "natural emanations of the mind" itself (*ibid.,* ch. vii, 1, 2).

It will be observed that up to this point the only disagreement between such men as Locke and a man like More was the terminology that they used. Locke himself knew that the axioms of arithmetic were intuited as true but would not for that reason believe them to be innate. He did not believe that the rules by which the mind organized its experiences were themselves perceived in experience, in spite of certain sentences in the early books of the *Essay* which would give the reader that impression. If the two men could have agreed on a terminology, they might have agreed on a common epistemology. But behind the epistemology lay a metaphysics which would have been abhorrent to Locke, the peculiar kind of Neo-Platonism which More and his friends found so consoling to their religious feelings. For instance, Locke, though it is perhaps unnecessary to point this out, believed firmly in the existence of the God of revelation, but he believed in His existence on rational grounds; His existence could be demonstrated like all other truths. More, on the contrary, maintained that His existence was another of the innate ideas. The discovery in one's mind of an idea of which one could not rid oneself would have been evidence to Locke of no more than a kind of intellectual stubbornness, a disease of which the cure lay in looking about for people who either did not have the idea or who had actually rid themselves of it. He knew that atheists, whom he detested, did exist and that their existence was evidence that every man did not possess the idea in question. Hume would have looked for an impression which might have been the original of the idea and if he did not find one—and it goes without saying that he could not have found an impression which was the original of the idea of God—he would have rejected the idea, though not necessarily that for which it stood. But More, finding the idea of God in his own mind and having eliminated idiots, madmen, and by implication savages from serious consideration, could maintain that since such an idea could not arise from sensation, it must be innate. The idea of God, an eternal substance, infinite in essence and goodness, omnipotent, omniscient, and necessarily existent "of itself," (*ibid.,* 3) is the same idea which Descartes discovered himself to have. But Descartes by the application of the causal postulate maintained that no finite being could cause such an idea to arise in the mind and that hence only an infinite cause, with the other traits indicated, could have produced it. But the only such being is God Himself and therefore He must exist. More, on the other hand, is satisfied with the inner light and finds the idea of God, like the ideas of the arithmetical axioms, self-substantiated.

Nevertheless, in refuting his opponents he goes beyond the simple acceptance of what the inner light reveals. He points out that his opponents do not see that the idea of God is that of a being whose essence implies existence. The existence of God is necessarily implied in the idea of God, as the sum of the angles of a triangle is implied in the idea of a triangle. To put the matter in other words, More believed that a spiritual being has the same nature as an idea. Whatever is implied in an idea may legitimately be asserted of it —which is almost a truism. Thus there may be geometrical figures which have never been exemplified on paper or otherwise. Yet a geometer could frame ideas of them—the chiliagon is the stock example—and could presumably draw out of the idea a set of theorems which would be true of them. So with the idea of God. If there is no self-contradiction in statements which define Him, then we have a logically consistent idea of Him. If we find that one of the implications of those statements is His existence, then we have a right to believe in His existence. Unfortunately, though the idea as presented by More may not be "arbitrarious and fictitious," he does not show that God's existence follows from his essence but leaves the matter as a string of adjectives which he discovers when he contemplates the ideas. He would have done better to follow the course of Pascal. As it was, his proof of God's existence is a confused statement of St. Anselm's ontological proof.[5]

Behind much of More's metaphysical reasoning lies an assumption which was common in earlier periods, to the effect that matter cannot move itself but is utterly inert. What might be called autokinesis was the exclusive property of spirits or immaterial substances. It is therefore easy for More to argue that a human being could not be simply a mass of matter for he moves himself about voluntarily, moves other bodies, and performs all the mental operations of thinking, feeling, imagining, and the like, which are the very opposite of bodily motions. Therefore the soul cannot be the effect of the body, whether the body be thought of as the brain or the animal spirits, but must be an immaterial substance distinct from the body "which uses the *Animal Spirits* and the *Brains* for instruments in such and such operations" (*ibid.*, ch. xi, 11). The human soul in this way becomes a *"little meddal of God,"* and as it is to the body, so God is to the universe as a whole. But such an argument would identify God with the Neo-Platonic Soul of the World, the *anima mundi,* and not with that necessarily existent being of which we are said to have an innate idea. One might well ask whether the idea of a triangle could produce a triangle or the idea of the first law of motion could move anything. To this More would reply that it is precisely our ideas which would move our bodies and our concepts which generate our percepts. This becomes plausible only when we remember that for More the Neo-Platonic theory of emanation is taken literally.

In the first book of his work on *The Immortality of the Soul (Axioms,* 16 *et seq.)* he argues as follows. An emanative cause produces an effect "merely by being"; it does not move, it does not do anything; it simply is and out of it flow its effects. That there must be some such cause follows from the necessity of avoiding an infinite regress: if we go from effect to cause we must either stop

[5] More does, however, in the *Antidote,* ch. ix, give the cosmological proof as well.

at a First Cause or go on forever. But the First Cause must be self-caused. The human soul is not self-caused, but nevertheless as a spiritual substance it can generate its effects by emanation, as well as it can act upon matter. For unless it is absolutely impotent, there is no other way in which it could produce anything. For when matter acts upon matter, it does it by the literal contact of its parts. But a spiritual substance has no parts and cannot be said to touch anything except figuratively. Yet it can penetrate matter and indeed More repeats frequently arguments seeking to demonstrate that power. He needs it in order to explain how the soul organizes matter, for he cannot believe that order comes about spontaneously, without direction from some "plastic force." The human soul, like all others, permeates the body. On its lowest levels, it generates the action of the heart and lungs. Next comes perception when a material object is presented to us, though the material object is but the occasion of the perception. The higher faculties, imagination, will, and reason, are similarly her own possessions and cannot be explained as due to any changes in any one part or group of parts of the body.[6] The details of this exposition are of little importance, for they are fanciful in the extreme. What is important is More's attempt to explain such an experience as that of the sensory qualities as psychic emanations, not as effects produced here or there within the body. By spreading the soul throughout the body, while retaining its immaterial nature, he thinks that he is able to give an orderly account of sensation while abandoning nothing to the materialist.

Though there is much in Henry More which is repugnant to rational men, such as his belief in witches, yet it would be foolish to treat him lightly. It must be remembered that he accepted certain presuppositions of most men of his time, such as the inability of matter to initiate movement and therefore to cause anything by itself, and the inconceivability of order which is not given to things by a mind. Once these presuppositions are accepted, one must either land in a blind alley or assume the existence of some nonmaterial being which will cause changes, and a mental being which will bring order into the universe and into our part of the universe. If the human body, for instance, moves, it is either propelled by something outside of it or by something intimately united with it. It would seem reasonable that when we move through space, we are not propelled like leaves in the wind or billiard balls which are hit by cues. If that is so, then it would follow that the motive power is within us. And if the only motive power we know is that which is traditionally called psychic, then we will call it the soul. Furthermore, if our lives manifest order (and if they did not, the life-cycle—to start at the point most easily grasped—would not be as it is) then there must be some nonmaterial explanation of that order. And since order is always an "expression" of a mental being, we will explain it as the expression of the mind. Whether we use the word "expression" or "emanation" is of small moment; we shall need some term that will not suggest that a nonmental cause effectuates the order. The fundamental difficulty in all this arises from the presuppositions themselves, not from the inferences drawn from them. The whole concept of causality needed further investigation; the notion that processes required agents to perform them was more than dubious, though no one doubted it in the seventeenth century. Little was gained by invoking an ultimate cause when one's reasoning was frustrated except possibly a reputation for frankness. In spite of the repulsive rhetoric of Henry More, he could have been rewritten in a simple and clear style, for the logic, which was often shrouded by the rhetoric, was not hard to grasp. He was not a mere synthesizer of ancient dogmas, though he derived much of his inspiration from them. He was to be sure a Christian apologist, as he understood Christianity; but he tried to base his apologetics on reason. For us he stands as a man who confronted the empiricists with outspoken demands for intelligibility. He asked how it was possible for unthinking matter to produce thought, for inert matter to produce movement, for order to come about by chance rather than plan, for separate and ununited percepts to form judgments. One answer might have been that facts were not questions and that if these things were so, then they were so and that was the end of it. But not even Hume was willing to take that stand.

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[6] This argument will be found in *Immortality,* II, ch. x.

It is customary, and not faithless to fact, to consider Ralph Cudworth (1617–88) as the *alter ego* of Henry More, who turned the Platonistic argument of his friend toward ethics. His main work is undoubtedly *The True Intellectual System of the Universe*, first published in 1678, though written much earlier.[7] Cudworth points out in his preface that his purpose is to refute what he calls fatalism, of which he distinguishes three types: (1) the determinism of a pure materialism in which physical law, i.e., the laws of dynamics, controls all changes in the cosmos; (2) a theistic fatalism according to which God determines all change without regard to standards of goodness or justice; (3) a theistic fatalism according to which God does respect moral values but nevertheless predetermines all human behavior. Cudworth's objection to all three types of fatalism is based on their denial of human freedom. For himself, he believes that (1) "there is a God, an omnipotent understanding Being, presiding over all"; (2) "God, being essentially good and just, there is . . . something in its own nature immutably just and unjust"; (3) "we are so far forth principals or masters of our own actions, as to be accountable to justice for them, or to make us guilty and blameworthy for what we do amiss, and to deserve punishment accordingly" (*ed. cit.*, p. 34). Since he puts the burden of proof upon the atheists, he considers it necessary to analyze their arguments and disprove them one by one.

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[7] The imprimatur is dated May 29, 1671. See the life of Cudworth by Thomas Birch, reprinted in the first American edition of *The True System*, of 1839. Quotations in my text are from this edition, which is itself a reprint of the octavo edition (London, 1820).

One of his most pressing anxieties is to establish teleology, which he takes for granted. He can find no atheistic doctrine which permits one to believe in it. To justify it, he assumes the existence of what he calls a plastic nature, below God in rank, but permeating the whole world of matter, both living and inorganic. This plastic nature acts purposively; and, if its existence be denied, he says (*ibid.*, p. 209) one is either forced to conclude that all apparent purpose is attained fortuitously, or that God intervenes in the creation and, presumably, behavior of "every gnat and fly, insect and mite." Both of these hypotheses seem nonsensical to Cudworth. It is to him inconceivable that the infinite regularity of things should come about by chance. Moreover there are many occurrences in nature, such as respiration, "as do plainly transcend the powers of mechanism." There are finally certain phenomena—his example is that of the "distant poles of the equator and ecliptic" (*ibid.*, p. 210)—which are flatly contradictory of mechanism. He cites Aristotle's refutation of mechanism from the example of artistry, wherein it is asserted that no work of artistry could be explained on purely mechanical principles. The second alternative, that God intervenes in creation every time something purposive is achieved, is to "render Divine Providence operose, solicitous, and distractious" (*ibid.*, p. 212). It would reduce nature to something so distinct from her creator as to signify nothing. Finally, the slow process of generation would be absurd if it were determined by an omnipotent being. In such processes we often see bungling and error, and surely no one could imagine that God could be guilty of such. Hence Cudworth has recourse to his plastic nature, "an inferior and subordinate instrument," which carries out God's rules and ordinances, but cannot act "electively and with discretion."

The source of the idea of a plastic nature Cudworth attributes to both Aristotle and Plato, though he suggests that Aristotle himself attributed it to Empedocles with his notions of Love and Strife as the two ruling forces in the universe. A plastic nature can harmonize opposites; it introduces discord, to be sure, but it reconciles the discord in a universal harmony. It operates for the achievement of ends and these ends are the good and the beautiful. These values are resident in the orderliness and "artificiality" of the cosmos.[8] Orderliness and beauty, then, become explanatory principles in themselves. That is, we can properly explain why certain things happen by giving their ends. This is clearly a reaction against the mechanistic theories which were contemporary with him, and not merely a set of arguments against Democritus and the Epicureans. It is an attempt to restore the general teleology of Aristotle and to rephrase it in Christian terms. The plastic nature, as he keeps repeating, is a kind of artist; both artisans and nature itself operate as if they were seeking goals. But, again in Aristotelian language, the artist exists outside his materials and impresses a form upon them; nature, as artist, is within the materials themselves. "Whereas human art cannot act upon the matter otherwise than from without and at a distance, nor communicate itself to it, but with a great deal of tumult and hurlyburly, noise and clatter, it using hands and axes, saws and hammers, and after this manner, with much ado, by knockings and thrustings, slowly introducing its form or idea . . . into the materials; nature, in the meantime, is another kind of art, which, insinuating itself immediately into things themselves, and there acting more commandingly upon the matter as an inward principle, does its work easily, cleverly, and silently" (*ibid.,* p. 220). Nature, thus, is like the soul, an incorporate law guiding matter according to fixed rules. Nature requires no consultation or deliberation to reach her ends, whereas men do, for nature is the impress of the Divine understanding.

But an impress of the Divine understanding is not the divinity itself. The understanding of God is separate and far removed from all Creation. It is modeled upon the Divine understanding; it follows the rules laid down by it; but it is the builder in relation to God who is the architect. The plastic nature is not conscious of what it does; it imitates the wisdom and art of God. Lest this seem strange to his readers, Cudworth produces the example of such habits as those of singing or playing on musical instruments. "Which habits direct every motion of the hand, voice, and body, and prompt them readily, without any deliberation or studied consideration, what the next following note or motion should be" (*ibid.*, p. 224). The main difference between habits and nature is that the former have to be learned, whereas the latter is unlearned and untaught. Yet the plastic nature has to be further differentiated from matter, for an opponent could maintain that Cudworth is simply giving a name to the regularity of natural events. Consequently he is anxious to point out, as Leibniz was also to do, the Cartesian identification of the soul with thinking or consciousness. He insists that wherever there is life some kind of soul must exist; and yet embryos and men in deep sleep and lethargy are not deprived of souls because they have no consciousness. The vegetables and beasts, human beings performing habitual acts, indeed the soul itself as distinct from its effects are not conscious. We have no way of knowing how the body affects the soul. When we think, we are aware only of the objects of our thought, not of the machinery by which these thoughts are produced. There is a long list of psychic operations of which we are unconscious and yet which cannot be termed material. Hence, if the plastic nature is not conscious, it must act "fatally, magically, and sympathetically" (*ibid.*, p. 229). By these terms, which Cudworth takes over from Plotinus,[9] he wishes to name a cause which is immaterial, psychic, and yet unconscious, like love, hate, and the other attractions and repulsions which we feel but which in themselves are not rational. We may, after experiencing love or attraction, bring it to consciousness and discuss it intellectually, but it is not itself guided by the intellect nor does it operate in accordance with reason. We ourselves do reason and do control our lives; or can, at any rate, use a faculty which is much higher than the plastic nature that is found in things. It is a lower form of life which emanates from the higher. Yet it is a form of life, however low in the cosmic scale, and hence incorporeal.

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[8] By "artificiality" Cudworth means the character of a work of art which, at least to his mind, suggests something made for a purpose.

Cudworth, like most of his contemporaries, could not believe that matter could be more than a passive something incapable of doing anything. It is, in Cudworth's words, a "resisting bulk, nothing but mere outside, *aliud extra aliud,* together with passive capability," without "internal energy, self-activity, or life belonging to it" (*ibid.*, p. 232). Hence when one came upon activity which seemed to be without life or mind, one was bound to interpret it as attributable to the action of something mental—or immaterial—either within it or outside it. Since the only mentality outside of the physical universe was that of God, it was necessary to show how God's mind could act upon the purely material world. One could turn to some form of pantheism which would make God's being permeate the world, but that would contradict the belief in a transcendent God, creator and judge of the world. Therefore, God must have His surrogate acting in accordance with His will and intimately united with nature. Its main task would be the harmony and order of the diverse things and kinds of things which are found in the cosmos and the production of unity in that diversity. "It must be one and the same thing, which formeth the whole, or else it could never have fallen into such an uniform order and harmony. Now that which is one and the same, acting upon several distant parts of matter, cannot be corporeal" (*ibid.*). In Aristotle no separate being was required to explain these observable features of the world; he could talk of Nature's doing nothing in vain, and yet not identify Nature as anything separate from natural occurrences. Just as in the case of human beings, he was able to speak of our souls as the final cause and purpose of our bodies, being related to them as cutting is to the axe; so he was also able to deny that they have ever existed apart from our bodies. But to Cudworth, as to other Neo-Platonists, this is an absurdity. To them the so-called active principle must be existentially distinct from that which it acted upon. Hence such phrases, as we have seen in Henry More, to the effect that the soul uses the body as its instrument. Unfortunately for Cudworth, he uses the Pseudo-Aristotelian *De mundo* as a genuine work and could therefore find in it the real meaning of Aristotle, which is that there is spirit, living and generative, which accounts for the order and form of the universe.[10]

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[9] *Ennead* IV, Bk. V, ch. xi.

Having made his universe a manifestation of goodness and beauty and hence governed by a plastic nature—a nature operating under God's rule—Cudworth has drawn a portrait of the macrocosm. The laws which correspond to our ideas may then be found exemplified in the cosmos without the cosmos having to go through a course of study to learn them. It needs no experience to teach it. It follows its nature. What then of the microcosm? Our minds possess among other ideas certain general, universal, and abstract theorems of science, which are self-verifiable. They exist only in the mind and have nothing in the material world corresponding to them. They are, of course, the Common Notions of Lord Herbert. When they are understood, or clearly perceived, they are seen to be true. The point here, as in Herbert and More—and for that matter in Descartes and Spinoza and even Locke—is that to understand such ideas is to see their truth. "No rational understanding being," says Cudworth (*ibid.*, II, p. 137), "that knows what a part is, and what a whole, what a cause and what an effect, could possibly be so made, as clearly to conceive the part to be greater than the whole, or the effect to be before the cause, or the like." (Yet in teleological explanations, the effect does exist before the cause.) Such knowledge, as distinguished from sensory perception, is absolutely true and will be so granted by all men. It was normal for a man of Cudworth's inclination to move immediately to a proof of the existence of God.

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[10] Cudworth does not say that this work is genuine. He says that it is written after the manner of Aristotle (*ibid.*, p. 237), but he uses it as if it were genuine. Cudworth's summary of his theory of the plastic nature will be found concisely stated *ibid.*, sec. 26, p. 242.

With astonishing ingenuity he proceeds to show all the weakness of the ontological argument of Descartes, which he correctly points out was anticipated by others. The argument which he himself finds more telling is that from the Great Chain of Being applied to a scale of perfections:

> It being on the one hand undeniably evident, that lesser perfections may naturally descend from greater, or at least from that which is absolutely perfect, and which virtually containeth all: but, on the other hand, utterly impossible, that greater perfections, and higher degrees of being, should rise and ascend out of lesser and lower, so as that, which is the most absolutely imperfect of all things, should be the first fountain and original of all: since no effect can possibly transcend the power of its cause; wherefore it is certain, that in the universe things did not thus ascend and mount, or climb up from lower perfection to higher; but on the contrary, descend and slide down from higher to lower: so that the first original of all things was not the most imperfect, but the most perfect being.[11]

This most perfect being is God. It is interesting to observe that Cudworth here overtly uses the principle *ex nihilo nihil,* which he says the materialists misunderstand. The intelligence could not, on this principle, come from brute matter which is not intelligent, nor could ideas come from the impact of matter on our sense organs. Knowledge is conferred by the mind on the things with which it comes in contact and it is conferred by the application of intelligible principles which are universal to particular experiences. Otherwise there would be nothing in our minds but several different impacts which moving material particles make upon us. The universal principles by which we know, e.g., the axioms of geometry, by their very nature could not come from experience but are part of our intellectual equipment. And this is a direct reflection of the mind of God. Corresponding to the universal ideas, there must be universal objects, or Platonic essences, and these essences must exist

[11] Volume II, pp. 148 ff. I have slightly modified the punctuation.

in the mind of God, their sensible existence being merely a vestment in which God has clothed them.

The *Intellectual System,* which is a long and exhaustive set of arguments against atheism, serves as an introduction to Cudworth's *Treatise Concerning Eternal and Immutable Morality.* This work, which was published posthumously in 1731, was not transcribed entirely by its author and hence may contain certain errors. But no one, to the best of my knowledge, has ever maintained that it did not accurately represent Cudworth's thought. In the third book of the *Treatise*[12] he elaborates his epistemology, showing first that sensation is not knowledge but a passion, a "dull confused and stupid perception obtruded upon the soul from without" (*ibid.,* ch. ii, 1, p. 405). It apprehends objects but does not know what they are. The reason why it cannot know what they are is simple enough; the nature of things is always expressed in the form of a universal, and sensory objects are always particulars, localized and dated. One may see a cat but not know its nature, which is expressed in the term *felinity.* That sensation can only apprehend particulars was traditional, and it was not until recently in American philosophy, when Strong and Santayana insisted that we perceived essences,[13] that it was seriously questioned. To know, then, is to assign a nature to a particular, to classify it under a general term, to grasp its essence as distinguished from its particularity. If the essence cannot rise out of sensory materials, then it must be contributed to knowledge by the mind itself. But if that is so the seat of ideas, the soul, must also be entirely distinct from matter, and its spiritual substantiality is thus justified. Sensation, Cudworth concludes (*ibid.,* ch. ii, 4, p. 408), has merely pragmatic value, a hint of the existence of the external world whose inner nature is unknown to it. The familiar doctrine that experience is but the occasion for knowledge, not its cause, reappears. Sense, he says in the picturesque language of his time and school, is the feeling of "a jog, knock or thrust made upon the body which the soul is united to" (*ibid.,* ch. iii, 5, p. 411).

As Hume was to say in his *Treatise,* though motivated by different interests, there is no essential difference between sensations and images. What we see in a dream or in fantasy is really one and the same. The latter are but weak sensations (*ibid.,* ch. iv, 5, p. 419). They may be aroused by our own volition or not; qualitatively there is no distinguishing between them and what we perceive in waking life. Thus, apprehending a sensory quality is no evidence of anything whatsoever; judgment is required to pronounce it real or imaginary; and judgment is made by us, not forced upon us. Since there are only two possible sources of mental contents, the external world and the internal, matter and the soul, if one is canceled, the other must remain on the books. Hence he is driven to the conclusion that knowledge is our own activity directed toward the things of the external world. We conquer and master them, as he likes to say, by knowing them. And knowing consists, let us repeat, in applying ideas to the particulars which are before us. "The primary and immediate objects of intellection and knowledge are not things existing without the mind, but the ideas of the mind itself actively exerted, that is, the intelligible rationes, reasons of things" (*ibid.,* Bk. IV, ch. i, 4, p. 425). Ideas in this sense of the word are assertions, sentences, judgments, not qualities. This is the sense which Spinoza, it will be recalled, also gave to this highly ambiguous term.

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[12] The version which I quote is in Volume II of the *Intellectual System.*

[13] See their contributions to *Essays in Critical Realism.* I have criticized the idea in a series of articles which appeared in the *Journal of Philosophy,* 1925 to 1927. The theory has certain affinities with that of Meinong in his *Gegenstandstheorie,* and the views of E. B. Holt, later disavowed, in *The Concept of Consciousness.*

To explain how our judgments—or ideas—are true, Cudworth returns to the vocabulary of Lord Herbert and assumes a conformity between the soul and the world itself. The soul is "all things intellectually" (*ibid.,* sec. 5), a mirror of the universe.[14] All we have to do is to reflect upon what is contained in, or implied by, our most abstract ideas. Thus knowledge that is abstract and remote from particular facts is the more demonstrable and the truer. The result would seem to be that what is called purely formal science today is always and demonstrably true, whereas imagination and sensation may be, and usually are, deceitful. Cudworth thus has only to list those ideas which we possess without any contact with experience. The outcome is that the faculties of the soul themselves—thinking as contrasted with what is thought about, sensing as contrasted with sensory objects—cannot be received from without but are expressions of our own psychic powers. Then come the moral notions. Finally relative notions.[15] We are back again at the principle that the sensible objects are simply the occasion of our pronouncing some judgment about them. They are no part of knowledge nor the cause of knowledge.

[14] That minds mirrored all reality, but with varying degrees of clarity, was to be repeated in Leibniz. The theory avoided, it was hoped, the problems raised by knowledge as the reception of material forces.

[15] The first statement is an anticipation of Leibniz's more famous one: "Nothing is in the intelligence which was not previously in sensation, except intelligence itself." The Platonistic elements in Leibniz's epistemology are very clearly enunciated in his letter to Queen Charlotte of Prussia, 1702. See George Martin Duncan, *The Philosophical Works of Leibniz* (2d ed.; 1908). This letter may be easily found in P. P. Wiener's excellent *Leibniz Selections* (New York: Charles Scribner's Sons, 1951), p. 355.

Though Cudworth is well worth close study, as are his colleagues in the idealistic tradition, for they have all been seriously neglected in favor of those of the same persuasion who came later, we must be content here with what has been already said. The next generation was more sensitive to the criticisms of their doctrine emanating from Locke and his followers and, in turn, developed certain arguments which might well have been considered by that group. That generation was less florid in its rhetorical devices. We shall begin with a man who is scarcely ever mentioned in the histories of philosophy, Richard Burthogge.

3. Burthogge

As the seventeenth century drew to a close, the members of the idealistic or Platonistic group, under the influence of Locke, undertook more detailed analyses of the problems of knowledge, and the labels which are applied to their views become more and more misleading. This is especially true of Richard Burthogge (1638–98?) [16] who, while retaining many of the Platonistic tenets, grants more to sensation than his colleagues do. He believed in the plastic nature which animates the cosmos, in the discovery of some truths by intuition, in the non-empirical form of understanding, but he also believed that the contributions of sensation to the understanding are real, though not identical with the "inner natures" of things. Much of this could as well be found in Locke as in Herbert or More or Cudworth, and we know that Burthogge knew the work of Locke. But his emphasis upon the religious significance of his theories is quite un-Lockean and there is some reason to believe that one of his aims was a reconciliation of the Lockean and the Platonistic theories of knowledge.

One of his fundamental principles is that the world is known to us only through our ideas of it. Things are not known as they are but "as they are in the Sense, Imagination, or Minde" (*ed. cit., Organum vetus et novum*, sec. 9). Things thus are transformed into ideas by our mental faculties; they appear as qualities and these qualities are purely subjective. Similarly the values and such relations as that of cause and effect, whole and part, are also subjective.[17]

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[16] The dates usually given are 1638–94, but, as Margaret W. Landes points out in the preface to her edition of Burthogge, the latter date is at least four years too early. See her *The Philosophical Writings of Richard Burthogge* (Chicago: Open Court Publishing Co., 1921), p. iii. Quotations from Burthogge are from this edition.

[17] The unwary reader should be warned that the meanings of the terms "objective" and "subjective" nowadays are the reverse of what they were in the seventeenth century. Burthogge actually says "objective," but I have preferred to follow modern usage. For a note on the shift in meaning see Landes, *op. cit.*, n. 5, p. 189.

So much is straight Platonism. Burthogge also assumes that things themselves, though their real nature is unknown and unknowable, do stimulate ideas, though what the stimulation consists in is not clear. Burthogge resorts to metaphors here (*ibid.,* sec. 24) and speaks of the "notions of the mind" as "*bottomed* on *Sentiments* of Sense." The real things are "grounds to Sentiments"; "the impressions of things without upon the Sensories, produce or occasion in them the Cogitations which we call Sentiments, as Colours, Sounds, Sapours, etc." It can be confidently asserted, then, that he believed in the reality of something external to the mind, and that, whatever that external something is, without it we should have no sensations. Moreover, having made a distinction between first and second notions, the former of which we might call ideas of sensation, and the latter both Locke's ideas of reflection and all the apparatus of thinking, he maintains that knowledge by first notions is clearer and more evident that knowledge by second notions. In fact, "what is against Sense, is against Knowledge" (*ibid.,* sec. 32). It is therefore impossible for a man rightly to believe in something that is contradicted by sensation, not even if it be something said to be revealed. It is on this ground that he rejects the dogma of transubstantiation.

The duality of first and second notions has a parallel in two sorts of truth: (1) that which he calls metaphysical, and which is found in the conformity between our ideas and those in the mind of God; (2) that which he calls logical and which is the conformity between our ideas and the things of which they are the ideas. The former cannot be grasped by us, for we cannot apprehend God's ideas though presumably we can know that they must exist. The latter, however, is our greatest concern. At this point (*ibid.,* sec. 69), Burthogge accentuates the difference between apprehending a sensory quality and making a judgment about it. He points out that apprehension in itself is no more true or false than a thing is. Only judgments can be true. Hence the clarity and distinction of a perception cannot be the reason for its truth, though true ideas will be clear and distinct. Calling Lord Herbert to witness (*ibid.,* sec. 70), he argues that truth lies in the conformity of things to our faculties. When this conformity exists, then we freely and spontaneously assent. Burthogge, like most idealists, is forced into some such situation as this since he admits that we cannot set idea and its original side by side and compare them. The congruity to which Herbert invited his readers' attention was in this case the logical harmony between two judgments. This was not of course his language but mine. We are enclosed in a world of ideas, and in the long run it is admitted that truth must be a relation between those ideas. There can be both logical consistency and inconsistency, and the judging mind can see for itself when and how its inferences hang together.

Yet Burthogge will not admit that the mind possesses at birth, or, if one prefer, by nature, "a system of notions and first principles" (*ibid.,* sec. 74) by means of which we might discover all truth and dispense with experience. Were that the case, we should be able by introspection alone to find the truth. The soul is too closely joined to the body to permit us to believe in such theories. "Ratiocination it self is an Animal act," he says, "not an abstract Action of the Soul . . . ; it is the Man reasons" (*ibid.*). This does not mean that all ideas come to us from sensation, but that there must be a consistency between all our judgments, including those made about the sensory experiences. It follows that the harmony, coherence, congruity, or consistency which is truth must apply to the whole mass of our judgments, and that such a position is attainable he asserts beyond question. That there might be gaps between the various sciences is to his way of thinking nonsensical. All ideas form one system which parallels the system of things. This is analogous to Spinoza's two attributes of God: in each system there is an item corresponding to an item in every other system. That the world of things is a harmony, the parts of which are so ordered that they cannot be torn out of the whole without ruining the whole, is an old Stoic principle which he seems to think is self-evident. But the harmony of the cosmos, though obviously a very influential and indeed inspiring idea, was nothing more than an obscure figure of speech. At most it was based upon a few teleological relations, relations of means to end, such as rainfall and vegetable growth. No one seemed to feel the need of really producing evidence for a completely harmonious world in which there would be no conflict of any sort. In any event, obscure or not, the cosmic order was pictured as an exemplification of God's ideas, which stood in the same relation to His handiwork as the idea which an architect might have would stand in relation to the house which he built. On this foundation there could be erected a theory that an adequate description of the harmonious cosmos could be made in a single system of propositions, and it would follow that separate systems—that is, the various sciences—would be false to the extent that they were separate.

This is a clear anticipation of the doctrine that the "truth is the whole," as well as of that of internal relations. There seems to be no evidence that Burthogge made anything of it; he simply stated it. It is curious that such men, whose paradigm of formal reasoning was Euclidean geometry, should not have wondered why all the axioms, definitions, and postulates were not reduced to one. It was, to be sure, a commonplace that the natural order is the simplest, and that in some sense of a highly ambiguous word the universe is unified. But the closest approach any of them made to unity was in their fundamental metaphors, by means of which they could advance the view that the universe existed to fulfill one purpose, or was composed of one substance, or was like a great organism. This seems to have satisfied them, though whether it really did or not, we have no way of knowing. In reading speculative philosophy, where there is no test of satisfactoriness but logical consistency, and where even consistency is dubious because of the vagueness and even ambiguity of the terms involved, one usually has to rest content with the simple statement of a man's beliefs. The English idealists of the seventeenth century were all theologians and used theological language as a matter of course. Whatever their pretensions to literal statement, they seldom saw the difficulty of using terms like "God," "the soul," "freedom," "action," and "passion," as if they were beyond the need of definition. Their opponents were usually in the more favorable position of setting all theological questions aside, either by fiat or by laying down the rule that they were beyond the scrutiny of reason.

The influence of traditions other than theological was also accepted without much question. It would seem that if we are confined to the circle of our ideas, there would be no need of looking for a world beyond our ideas, for such a search would be doomed to failure at the outset. But the encirclement of ideas could itself be interpreted in a variety of ways. We could emphasize, as some of the critics of idealism did, the egocentric predicament[18] and point out that all our ideas were personal property, and that by implication one could never emerge from one's own mind at the moment of thinking—a position which has been called the solipsism of the present moment. But one could also maintain that ideas, by their very nature, were interpersonal and that they were the one bridge which existed from individual to individual, a bridge whose solidity was proved by communication. A set of ideas was always universal in its meaning, even if particular in its existence. Not even Berkeley or Hume—both stout believers in nominalism—when they were talking about the origin of ideas, denied that two people could understand each other when they were discussing a given subject. The signs they used, the common nouns and adjectives, were in origin the children of dated and localized impressions; but in meaning they transcended both the moment and the place of their birth. They represented or stood for "meanings" which several minds could grasp, and the human minds could circulate in this world of meanings as geometers could circulate in a world of perfect triangles and squares and even chiliagons, and know what one another were talking about. But sooner or later the influence of what can only be called common sense made itself felt, and an attempt would be made to discover what ground there could be given for believing in a world of things which were not ideas. When they yielded to this impulsion, they carefully distinguished between ideas in the sense of images and hallucinations, and ideas in the sense of direct observations or sensory data. But even then they wished to show that the latter corresponded—to use the most colorless word at my disposal—to beings which were not ideas.

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[18] It may be unnecessary to point out again that the phrase "the egocentric predicament," is Professor R. B. Perry's.

Burthogge was thus not peculiar in attempting to discover grounds for belief in an external world, even though he maintained that substance was "a thing conceived under a certain notion" (*ed. cit., Essay upon Reason,* ch. v, sec. 1, p. 97). We do not conceive of substances as they really are but through their accidents, that is, through what Descartes called their attributes. These attributes may be simply their sensory qualities, their colors, sounds, and the like. We believe that attributes must be possessed by something and that thing is called a substance. "But what that something else is, to which [the attribute] belongs, I am willing to learn; and will ever honour as my great Master, that Person who will effectually teach me" (*ibid.,* p. 98). So far Burthogge is simply basing his reasoning to our ignorance of substances and yet to their real existence upon language. Our English sentences demand that predicates belong to subjects. And if we seriously and consciously argue in this way, then we are clearly projecting into nature our human customs of thinking. But Burthogge proceeds beyond this state of affairs to arguing that we observe things beginning to be and ceasing to be (*ibid.,* p. 101) and that *therefore* there must be some cause of their coming into being and ceasing to be. The regularity of their appearance and disappearance will not suffice. And since he will not permit the existence of an infinity of causes of causes of causes, he comes to the conclusion that there are first causes. These fall into two classes, the first causes of activity and the first causes of passivity, which he identifies with mind and matter respectively. Idealist though he be, he does not deny the real existence of matter: it is the universal patient, that which is always acted upon, which suffers effects but produces none. He cannot conceive of causality in any other way than that of cause, effect, and patient. The patient's behavior can always be described in terms of motion and it was, as we have repeated *ad nauseam* I should imagine by now, only minds which could produce motion. One might have thought that the first law of motion would have suggested that motion was an inherent characteristic of matter and that rest was simply zero motion. That something is at rest is relative always to something else, and the relativity of position and motion was not unknown at this time. But the habits of thinking in terms of agent and patient, of inert patients and effective agents, of matter and mind, were apparently too strong to be overcome at this date, at least by philosophers, whatever physicists might say. Beyond the point of maintaining what he cannot doubt, regardless of the reasons why he cannot doubt it, Burthogge refuses to advance. He will not adventure into discussing the nature of either matter or mind, of raising Spinoza's question of whether there is but one substance of which mind and matter are two attributes, of the "gradations of life" (*ibid.*, p. 104) which correspond to the various levels of substantial reality, or of any of the other hypotheses which might illuminate the dark areas which lie beyond our ideas. He is steadfast in asserting his fidelity to evidence, by which he means "the certain testimony of our faculties" (*ibid.*, p. 105). And all that this testimony tells us is that two substances exist, mind and matter. In describing them, he follows the lead of Descartes, trying to discover by the analysis of our ideas and notions just what traits are sufficient and necessary for defining each. He is admirable in his fidelity to the principles which he has laid down to guide him; but he is vulnerable in his too willing acceptance of these principles. Yet here, too, he can scarcely be blamed for doing what philosophers continued to do up to the time of Fichte, and in some cases beyond that time. Fichte was willing to declare that the unknowable must be eliminated from all philosophy. If something is unknowable, one can say nothing whatsoever about it, not even that it exists. This should not entail the belief that the imperceptible, for instance, is non-existent, unless we also have reason to believe that there are no conditions under which any knowledge could be had of it. No one would be so obstinate nowadays as to deny the existence of molecules, atoms, and the inhabitants of the subatomic world, though it is true that Auguste Comte in deprecating the use of microscopes almost approached that state of stubbornness.[19]

4. JOHN NORRIS

The philosophy of John Norris (1657–1711), insofar as it concerns us, is contained in his *Essay Towards the Theory of the Ideal or Intelligible World,* first published in 1701–4.[20] Norris, who had studied More and Cudworth, and sympathized with many of their views, nevertheless believed that no one had satisfactorily solved the problem of the relation between ideas and the world of particulars. He had great admiration for Descartes and Locke, accepted Malebranche's theory of our vision in God, and used as his most constant source of inspiration the various works of St. Augustine. Like More and Cudworth, he was a clergyman and naturally accepts not only the truths of Revelation, as he understands them, but also the necessity of harmonizing the results of philosophy—or science—with those of Scripture. Nevertheless one can understand his epistemological theory without having recourse to religion, for the problem which he sets forth in his subtitle, the relation of the intelligible world to human understanding, is much more a problem of science than it is a religious problem. For if one believes that general ideas do exist, and indeed everyone admitted that we make use of them in reasoning, then their relation to sensory experience arises as a question, whether one is an empiricist or an idealist. If one followed the idealistic lead, then one had to recognize that sooner or later one will be confronted with things, localized and dated, and these things are antithetical in their nature to ideas. If, on the contrary, one follows the Lockean direction and begins with the apprehension of these particular sensory qualities, then one sooner or later comes face to face with the question of how we know general laws and rules.

The idea of an intelligible world distinct from the sensible world and characterized by traits the very opposite of the latter's traits goes back at least to Philo Judaeus, but its most influential statement was that of Plotinus. Here the world of ideas was timeless and spaceless, immutable, logically related in a hierarchy of ascending generality, culminating in the One from which all ideas flowed; the world of things was, on the contrary, multiple and mutable, essentially spatial and temporal. The former was known to the intellect, the latter grasped by sensation. The former was the archetypal original of which the latter was the imperfect—because materialized—image. In the work of the early English Platonists, the former was known intuitively and its inhabitants were innate ideas in the sense that, at whatever date the mind began to think, it would think only through the medium of them. As we have seen, these inhabitants were mathematical axioms, logical principles, and moral notions. In ancient Neo-Platonism the intelligible world was an emanation from the cosmic Intelligence which in turn emanated from the One. The Plotinian Trinity was the three highest hypostases, or persons, the One, the Intelligence (the *Nous*), the Soul of the World. In medieval Christian thought, the One was identified with God, and hence it was easy enough to maintain that the intelligible world was composed of the ideas in His mind. The identification was made by St. Augustine, who had gone through a Platonistic period as a young man, and expressions of it and its consequences are found frequently in his works. It will be recalled also that Malebranche had maintained that the human mind sees whatever it sees in God. And since knowledge was impossible if it were to be reduced to the apprehension of particulars—for particulars say nothing—Norris, like his colleagues in the idealistic tradition, saw knowledge as an interpretation of the sensible world made through the directing force of the ideas.

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[19] Since I am limiting myself to those philosophical theories that contributed to lasting traditions, I have refrained from discussing Burthogge's theory of the soul of the world, though it is of interest in itself. It will be found in Landes' edition of his philosophical writings, beginning on p. 141.

[20] I use the third edition (London, 1722).

The first volume of his major work describes and justifies the existence of such a world as being the ideas in the mind of God. The second applies the conclusion to epistemology. It is argued by Norris, and admitted by most men, that only in formal reasoning could there be absolute truth. Regardless of whether the theorems of geometry are exemplified or not in our experience, they are true. They necessarily follow from the premises of the system, and the premises were believed to be indubitable. Empirical knowledge, however, is contingent and one can at best maintain that only if the world of things correctly exemplifies what logic demands of it, will statements made about it have unquestioned truth. Moreover, one can proceed logically from the more general truths to the less general and continue the process as far as one wishes: one will never by logical means alone reach existence. In modern language, existence is a surd; it is found, but it is never simply deduced. Yet we do have knowledge of it and reliable knowledge. How are we to explain this apparent paradox?

Norris begins this part of his theory (*op. cit.*, II, ch. iii, sec. 1) by distinguishing between the act of thinking and the object of thought, both of which, he says, are called by the same name, "thought." The objects of thought may be both ideas and that of which they are the ideas. But in treatises of epistemology we are to limit ourselves to the former. The act of thinking and the ideas about which we think are the whole range of theories of knowledge. Since Norris was a close reader and admirer of Descartes, he included among the acts of thinking all so-called mental processes: willing, desiring, loving, "and all the passions, nay, even *Sensation* it self" (*ed. cit.,* sec. 7, p. 109). Yet after pointing to specific acts of thought, he confesses that he does not know what thinking is, for clearly he could not have an idea of what, by its nature, is not an idea. This is the problem which confronted Berkeley, too, when he came to the nature of perceiving as distinct from that which is perceived. The instrument of perception, it was believed, could not itself be the object of perception, and the analogy of the eye which sees but does not see itself was sometimes invoked to intimate what the problem was. In Berkeley we were said to have only a "notion" of our perceptive acts, and that word was a favorite among the English Platonists. The trouble here again was the vexatious distinction which was believed to be necessary between what a thing is and what it does, between its nature and its behavior. In our own time the distinction has been rejected and the nature of a thing has been identified with its behavior: a thing is what it does. In psychology this was the basis of behaviorism, though when the behaviorist came to identifying behavior, quarrels arose within the group. In Norris our ignorance of the nature of thinking, as an act, did not prevent our knowing somehow a good deal about it. "As unknown as I am to my self, methinks I have a confuse Interview of this involv'd Secret, like the glimmering Light, that trims the edges of a dark Cloud" (*ibid.,* sec. 9, p. 112; cf. Plotinus, V, i, 2). He could tell when he was thinking and when not (if such times be); he could distinguish between the various acts of thinking; he could observe the difference between thinking about an act, such as moving his hand, and the act itself. Moreover, and he emphasizes this, the act of thinking is always of a uniform nature; it is the objects of our thinking which introduce difference. Whether one think of a triangle or of a horse, the thinking itself is the same; the triangle and the horse are different. In the language of the time, the modes of thinking are the same in nature; the ideas are different. Unfortunately this is obscured by our custom of paying little if any attention to the act and all to its objects.

When we reflect upon our thinking[21] we observe a primary distinction between perception and volition. All understanding belongs to the former, assent to the latter. Knowledge, then, is the simple apprehension of a clear idea; no judgment is needed in order to know. The truth is presented to us and we see it. So long as we restrict our judgment to what we clearly perceive, we shall never err, though we may remain in ignorance of some things, that is, of the things which we do not perceive. Volition is within our own power, so that the mind may be said to be purely passive in sensation (*ibid.,* ch. iii, sec. 4, par. 3, p. 134). When, however, we attend to certain ideas—and here Norris is referring to abstract ideas—the mind is partly active, partly passive, active in studying and attending to these ideas, passive in that it does not fabricate them. For abstract ideas do not exist side by side in complete distinction from one another. On the contrary, they are merely different aspects of a single whole (*ibid.,* sec. 7) and when we dwell upon abstract ideas, we enlarge our mental powers in the sense that we attend to more and more inclusive objects. Here Norris is invoking the Plotinian theory of a hierarchy of ideas which in his first volume he had called the intelligible world.

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[21] Norris is scrupulous in admitting that such a term as "reflection" is metaphorical when applied to the operations of the mind, since it arises first in the material world.

By attending to such ideas we see—we do not reason to this conclusion—that all are both of a *real* and an *ideal* nature (*ibid.,* sec. 8, par. 2, p. 180). In essence an idea is whatever it is; but an idea may and usually does represent something beyond itself; namely, its object, that of which it is an idea. All ideas are essentially divine; that is, they are in themselves ideas in the mind of God. But they represent not God but His creatures. Since the distinction between matter and spirit is clear, following Descartes, and since ideas are always spiritual in essence, they may be discovered to represent either material or spiritual beings. But since ideas, even when representative of material objects, cannot be caused by effluvia from such objects or impressions made upon the brain by them, we are left with representation as a fundamental principle in the system. In vision, for instance (*ibid.,* sec. 9), there is to be distinguished the material effect of certain rays upon the eye; but those rays are not the visual idea. Vision differs from the other senses in that it comprises both a sensation (color), and an "ideal perception," which is the representation of the material object that I am said to see. The sensory qualities, whether visual or not, are what we would today call subjective. But whereas the sensory qualities of audition, olfaction, and so on, possess only an "inward feeling," vision also possesses an "outward perception" (*ibid.,* par. 9, p. 193). Regardless of this, it is the mind, not the eye, which sees; and the only reason why Norris spends time on vision is that it appears to put us into more intimate contact with the external world. Yet as far as our ideas are concerned, visual ideas are as mental as any other kind.

Norris cannot deny the connection between certain bodily states and certain mental states. He is not unaware of the neural apparatus and the role it plays in perception. But, because of the causal postulate that only similars can sustain causal relations, he, like so many others, has to resort to some sort of evasion when speaking of the relations between the mind and the body. Representation comes about "by vertue of that Law of Union which is between the Soul and Body" (*ibid.,* par. 15, p. 198). But the Law of Union is no more than a phrase avoiding in its connotations the consequences of psychophysical interaction. The same Law accounts for the two aspects of vision, the sensation of color and the awareness of an object. The idea itself is occasioned by these experiences, though not caused by them. It stands midway between the spiritual being that it represents and the sensation that arises from the physical object. The idea is intelligible, the sensation unintelligible. We can actively turn our attention to the contemplation of ideas; we passively receive our sensations. But, again, since bodies can act only upon other bodies, there must be a spiritual being which produces these spiritual effects upon our minds. Norris obviously picks up the clue of Malebranche. The physical impressions are but the occasions on which God produces our sensations within us. But similarly, as the body cannot move the soul, the soul cannot move the body (*ibid.,* par. 39, p. 226).

From this point on Norris follows his French master very closely. The ideas which we contemplate are really ideas in the mind of God and, when we contemplate them, we have a vision in God. Yet we also experience particular objects and we can be led astray by them. Of these there is no genuine science, for science deals only with necessary truths, not contingent. This is all very well, but even the sensations are produced by God and must have some purpose other than that of misleading us. Norris, like so many other epistemologists, gives us an excellent account of how we reach truth, and of what to do to avoid error, but unfortunately for him he gives no reason why anyone should ever err. We intuit the intelligibles directly, immediately; and among them is God Himself. But we also have ideas of material objects and they, along with many spiritual objects, are known only through the mediation of representative ideas. It is through them that we can have natural science, for science is "only of Necessaries and Immutables" (*ibid.,* ch. vi, par. 6, p. 317) and material things in themselves are mutable and contingent. But again our contact with these objects is established by

God, and our mistaking sensations connected with them for knowledge is also presumably caused by God, for there is no other cause left in Norris' universe. Is our erring to be attributed to God? On the contrary, Norris' God, like Descartes', is incapable of deceiving us.

Our ideas, then, are God's ideas. Through them we construct systematic science, eternally true and necessarily so. It comes therefore as no surprise to read (*ibid.,* ch. xii, par. 8, p. 430) that the world of things is not only unintelligible but quite superfluous. That there should be any such world—the question which we posed above—is left a mystery. It is a desperately imperfect fulfillment of God's plans, for its general features are the very opposite of the plans. Norris does not hesitate to paint the world of material things in the darkest colors. It is never directly known; it is temporal and mutable; it leads us astray from the truth; in itself it is unintelligible. He is, of course, justified in maintaining that insofar as knowledge must always deal with universals, the simple apprehension of particulars could not be knowledge. But what is it? The world of things is not the collection of instances from which we can abstract generalities. It cannot serve as evidence of general ideas, since no particular can prove a universal, though it might disprove one. It simply exists, confronts us, as the twentieth century was to say. Curiously enough, some thirty years before the publication of the *Essay Towards the Theory of the Ideal or Intelligible World,* men like John Graunt and Sir William Petty were laying the foundations of an intellectual technique in which probability would take the place of eternal and immutable truth and in which universals would be replaced by statistical groups. But their influence on epistemology was nil.

5. BERKELEY'S *Siris*

Though Berkeley is best known nowadays for his theory of knowledge and as a continuator of Locke's so-called empiricism, he became in his later years a representative spokesman for English Platonism. In 1744 appeared his *Philosophical Reflexions and Inquiries Concerning the Virtues of Tar-Water,* re-entitled in the second edition *Siris,* the Greek for "chain." It is the second title that points to the ideas which interest us in this study, for though Berkeley's own contemporaries were more concerned with the virtues of the panacea which he explained in his reflections and inquiries, they form now only an incident in the history of medicine, though the arguments for a panacea were, like most such arguments, based upon a metaphysical assumption.[22] That assumption was, briefly, that all things in the universe possessed a common nature and that, since similars could stand in a causal relation to one another, if one could find a substance which summed up in itself all the properties of the elements, that substance could produce effects which no other substance could produce. Since the human psychophysical organism was believed to be a microcosm, the substance in question would stand in a special relation to it, as a sort of second microcosm. The intimacy of this relation was such that, on the principle of *similia similibus curantur,* all our ills ought to be curable by it. Whether this was because illnesses were held to be an insufficiency of one of the elements—or of one of the humors which corresponded to the elements—or not, I do not know. But in diseases caused by such insufficiencies the panacea could supply what was lacking. In any event, tar-water was an acid mixture derived from the distillation of pine, balsam, and similar woods. In accordance with the chemical ideas of some of the leading scientists of the time—Newton, Homberg, and Boerhaave—whatever characteristics are found in plants come to them from the air. Thus the air is a grand mixture of whatever elementary "principles" a specific scientist found necessary for vegetable life. The details of this part of Berkeley's argument need not concern us, curious though they are. What is of more interest is the use which he makes of his earlier theory of ideas in building up a Neo-platonistic metaphysics. For it is this part of his thought which reappears in later philosophies of nature.

The vegetable soul is then breathed out of the plant into the air and the air is breathed by us. But it is also the "seminary of minerals and metals" (*op. cit.,* sec. 142), which on the principle *ex nihilo nihil* must come from somewhere. Air is thus envisioned as no element but a mixture midway between whatever composes earth and the finer and more volatile spirit that is fire. The latter (*ibid.,* sec. 152) was itself found in a still purer form known as aether or "pure invisible fire." It is this which is the ultimate material substance. Berkeley traces this back to Heraclitus; and, in fact, that even the soul was a sort of fiery particle appears in the common speech of many centuries. But it is only the material substance, not the real motive force in the world, for Berkeley had already demonstrated in the *Principles* (*ibid.,* sec. 26–28), and in this he was in agreement with all his fellow Platonists, that nothing material could ever move anything by its own powers alone. Only something mental or spiritual could move things. The fire which seems to move things is but a sign of the real active principle which, in the long run, is God.

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[22] All quotations from *Siris* are from the A. C. Fraser edition of Berkeley's works. The history of the idea that the whole universe is a Golden Chain of Being is given in detail in A. O. Lovejoy, *Great Chain of Being* (Cambridge: Harvard University Press, 1936). Fraser, in his introduction to *Siris,* lists twelve tracts which were published between 1744 and 1749 on the subject of tar-water as a panacea.

Here (*ibid.,* sec. 160) Berkeley introduces a paragraph which is essential to an understanding not only of his special views but in part of the views of his school. I quote it almost *in toto.*

> The mind of man acts by an instrument *necessarily.* The . . . Mind presiding in the world, acts by an instrument *freely.* Without instrumental and second causes, there could be no regular course of nature. And without a regular course, nature could never be understood; mankind must always be at a loss, not knowing what to expect, or how to govern themselves, or direct their actions for the obtaining of any end. Therefore in the government of the world physical agents, improperly so called, or mechanical, or second causes, or natural causes, or instruments, are necessary to assist, not the governor, but the governed.

The distinction between the mind of God operating freely and the minds of men is retained here as in the *Principles.* But whereas in the *Principles* the mind of God acts as a stable and uniform world, that world which permits invariant scientific readings, here it is the one absolutely free agent. The minds of men need a constant world of order so that they may fulfill their purposes, relying for that on a predictable future. The physical world turns into a set of signs of this orderliness which individual minds may interpret. This set of signs is still God's ideas and still generates ideas in men's minds. But its primary function is to assist human beings in planning their lives. If this is taken literally, then each physical object is not only to be understood as so much sensory quality: color, sound, and the like; but also as an instrument for human use. If it could be believed that Nature did nothing in vain, it was even easier to believe that God made nothing in vain, and to surround men with the conglomerate mass of sensible objects and to endow them with no human utility would certainly have been vain, unless they were to be considered as obstacles to human desires and thus morally useful. The world of things interpreted as signs of God's purposes and in that way guides for men can also be understood as permeated with a spiritual nature, the Plastic Spirit of Berkeley's predecessors. In Berkeley, however, the Plastic Spirit is replaced by the pure invisible fire, or aether.

It is this which explains the presence of life, both vegetable and animal; and again we must point out that, if living beings were entirely material, they would have no power of self-movement, autokinesis. It is this assumption about matter that lies behind all the speculations of the English Platonists. It unifies all creation by giving it a common nature—and a common nature which avoids the errors of pantheism. Since it can be found in several forms, depending on its degree of visibility, it can be made parallel to the different degrees of "reality" from the grossly material to the divine. To use Berkeley's own examples, at the risk of making him appear less intelligent than he was, we find the cosmic pure fire in light, animal spirits, muscular motion, fermentation, vegetation, and "other natural operations" (*ibid.,* sec. 229). All such changes involve motion, but none appear to be caused through the imposition of outside forces. It must always be recalled that in 1744 chemistry was barely in its infancy, and the theory of the four elements still stood. If fire exists in so many forms, and if these forms exist on so many levels of being, then fire must itself be heterogeneous, a conclusion which Berkeley accepts. It contains in itself the natural causes or "seeds" of all sublunary things (*ibid.,* sec. 164), which seeds were the seminal reasons of the Stoics. Parallel to the seeds were ideas, and the ideas of God were parallel to those of men. None of this apparatus would have been necessary if Berkeley had been able to be satisfied with a simple descriptive statement of the laws of nature. He is willing to accept such laws as demonstrated by scientists like Newton, but he believes that descriptions are not enough. They are "rules or methods observed in the productions of natural effects, the efficient and final causes whereof are not of mechanical consideration" (*ibid.,* sec. 231). Since he believes that explanation must always give efficient and final causes, "it would seem the mechanical philosophers never explained any thing" (*ibid.*). Mechanical laws are good things to have and Berkeley never makes light of them. They are good because they direct us how to act and teach us what to expect (*ibid.,* sec. 234). But we want a more complete account of things and that can be furnished only by the discovery of what purpose is achieved and whose purpose. Thus, one is impelled to proceed from science to philosophy and from philosophy to theology. Only by seeing natural law as the decree of God, and God as the God of the Bible, can we obtain a fuller understanding of the world around us. For by accepting that God as the mind which actuates the aetherial spirit which, in turn, permeates all nature, we immediately see the relevance of moral values to nature.

"Intellect enlightens, Love connects, and the Sovereign Good attracts all things" (*ibid.,* sec. 259). In that one sentence we have a compendious statement of Berkeley's philosophy as it appears in *Siris*. For it asserts not only the intelligibility of nature, but also the inextricable intertwining of values and facts in which he so fervently believes. To his way of thinking, the Democritean philosophy, as his school called purely physical science, leaves the universe shorn of goodness and beauty and, at best, relegates them to the human sphere. That might well be enough, but to a man of Berkeley's temperament values could not be substantiated unless they were firmly rooted in the nature of things. Human values must, he believed, be at least an image of cosmic values. The biblical justification of this was, of course, God's seeing that His creation was good, just as the biblical justification of the world's intelligibility was the opening of the Gospel according to Saint John. In Plato the supposed basis was in the *Phaedo,* where Socrates criticizes the physicists for overlooking the link between the good and the necessary. If changes did not occur for an end, which is the good of the change, then God and Nature would be doing things in vain and the whole cosmological scheme would dissolve into "meaningless" operations. They might be regularly repeated but would be no more than that. But if a general plan is discoverable and that plan is the purpose of the Creator, then all incidents in fulfilling it have their significance. If some are in themselves—that is, separated out of the totality of things—bad or ugly, that is because of the separation. Fitted into their place they are good and beautiful. But we must rise above sensory experience to see this, and consequently Berkeley here departs from his earlier emphases upon sensory experience to accentuate his belief that ideal existences must have all the qualities of the ideal. In other words, he draws out of his epistemology a metaphysics which he thinks is logically entailed in it. One could, to be sure, draw out of it many other metaphysical systems if one were not already convinced of the truths of the Christian religion. But just as even in the *New Theory of Vision* Berkeley's purpose was to confute atheists, so here he was to establish Christianity on a rational basis. The establishment reduced to seeing what reasons he could give for his faith. But, as we have pointed out so frequently in this study, one cannot simply reason without orientation. One has to have, at a minimum, a conjecture that one wishes to prove.

There is but one more item of this phase of Berkeley's philosophy to be noted: his apparent new interest in what he had called *notions* in the *Principles*. Notions differed from ideas in that the latter came from sensation and were what common sense would have called images of sensory qualities, either single or combined. Notions were those intimations which we have of our own existence, of beings that were not in the external world and could not be apprehended by sensation. The notions, which were not closely examined in *Siris,* were much like the innate ideas of the earlier English Platonists; that is, they were latent in the human consciousness and were regulatory principles of knowledge. An active mind, he said in the seventh dialogue of his *Alciphron,* cannot be an idea or like an idea.[23] For ideas were always effects produced in the human mind by the ideas in the mind of God, and they corresponded to objects, which were assumed to be inert. In the third edition of the dialogues, he added the significant words: "Certainly it must be allowed that we have some *notion,* and that we understand or know what is meant by, the terms *myself,* will, memory, love, hate, and so forth; although to speak exactly, these words do not suggest so many distinct ideas." It was precisely this which Hume had denied in the *Treatise,* and it must be admitted that, if the mind can know only its own ideas, then it cannot also have knowledge through notions. But some means had to be provided for knowing what could never be apprehended by ideas, unless one was to fall into the scepticism of Hume or give up rational philosophy as a whole. By suggesting a means for catching activities on the wing, Berkeley, uneasy though he was about it, allowed one to have knowledge of the self and conscious processes without turning them into reflections of sensory qualities. It demands no great philosophic skill to see that once the way is open for notions to be accepted as knowledge, the way to verification is closed. For the notions are by their very nature private and incommunicable. Hume himself was willing to admit that some people might intuit their selves; but that as for him, he could not. This admission is always necessary when one falls back on introspection as evidence. For, in the long run, communication depends upon our possession of a language which refers to common experience, and the only way in which a person can communicate a private experience is by finding some commonly accepted terms that will describe it. The *je ne sais quoi* usually has to be resorted to on such occasions, the simile, the *as if.* But these devices are never satisfactory for the simple reason that they are but approximations to what a man feels. On the other hand, no one can reasonably doubt that another may have inner experiences that he cannot express in commonly accepted terms. One may, like the early behaviorists, flatly deny that there is any private experience, though how one can honestly deny the existence of something the description of which one avowedly does not understand, is as difficult to grasp as the assertion itself.

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[23] Fraser edition, Vol. III, p. 327.

We shall see later that the hints given by Berkeley about notions were duplicated by the Scottish Realists, who also insisted that there was an act of perception different from that which was perceived. Whether they actually took this over from Berkeley or not, I do not pretend to know, though Reid, the so-called founder of the school, was an early admirer and student of Berkeley. If we could know only our own ideas and if there were some terms which did not name ideas, then they were meaningless or misused. But Berkeley for obvious reasons could accept neither of these consequences. For not only did he need a subject for knowledge, someone who could, at a minimum, judge, assent, and possibly be mistaken; but he also needed something which could escape from the flux of appearances. That permanent being was the perceiving and thinking person, a monad, as he called him (*Siris,* sec. 346), "the indivisible centre of the soul or mind." This monad occupies in the individual's life the same position as God, or The One—for Berkeley gladly takes over Plotinus's term—occupies in the cosmos.

As one reads through *Siris,* one sees that behind it lies the basic metaphor of the microcosm. The details, most of which are borrowed from ancient Neo-Platonic and Hermetic writings, are introduced step by step to illustrate the parallelism which exists between man and the cosmos as a whole. The technique, as everyone knows, was old, and it was perhaps the antiquity of it which made it so persuasive to Berkeley as he sat isolated on the rocks of Newport. For, like More and indeed Lord Herbert, the universal consent of mankind could be demonstrated by the testimony of the Ancients for the very reason that they were believed to be less corrupted by the progress of the sciences. In them innate knowledge spoke without prejudice. And just as Pico believed that all philosophy, beneath the diversity of verbal expression, was one, so Berkeley in *Siris* believed that he could show in his collection of ancient dicta a community of wisdom which was, so to speak, the pure emanations of minds fresh from their Creator's hands. Fortunately much of this, Plato and Aristotle excepted, existed only in the form of fragments lifted out of context and preserved in the anthology of Stobaeus or quoted by commentators on Plato and Plotinus. Thus he had no need to consider the reasons why his authorities said what they said, and indeed had no way of doing so.

Siris remains not merely as a treatise on a medical panacea, but also as a sketch of a metaphysics in which the Great Chain of Being turns into both a community of perceiving selves and a series of levels of reality. It is a book which will undoubtedly repel readers who look for naturalistic explanations of all problems and who have a deeply rooted dislike of metaphysical speculation. In cogency of reasoning it cannot compare with his earlier writings, but as a picture of a spiritual universe, the bases of which are the conclusions of an epistemology, it should be taken seriously and deserves respect.

CHAPTER 8

Leibniz and His Predecessors

German philosophy before Leibniz was largely given over either to mystical writings or to a mixture of mysticism and the allegorizing of the natural world. Both of these tendencies made themselves felt in Leibniz' own work, and, since it is part of our problem to relocate philosophers in the traditions out of which they emerged, we shall attempt to sketch the background of the great seventeenth-century genius. Whether one returns to Meister Eckhart or stops before his time is of little importance, for mysticism is not a philosophy which grows, but is largely a repetition of the same themes in different languages. In fact, if ever there was a philosophy which could be said to be perennial in the literal sense of that word, it is this. One not only finds it in all ages of which we have records; but in many cultures and, what is even more interesting, the figures of speech which one finds at different and remotely separated periods are often identical or closely similar. It is, of course, a religious philosophy, usually the spontaneous expression of an individual's own personal religious experience, not the analysis of other men's ideas. Even when, as in the famous *German Theology*, dated in 1497, the author comments on a passage of Scripture, he does not tell what the passage means, but what it means to him. That words and sentences can mean several things to different people is obvious enough in the sense that connotations may vary. But to the German mystic the connotation is of more importance than the denotation. This tradition of interpretation has never died out in German philosophy, though I should not like to be taken as saying that it is the only exegetical method used. But to absorb a text into one's own life, to make it one's own, to return it to one's readers with a new sense, to call that new sense its real or deeper meaning, is a method which appears in Hegel's *History* *of Philosophy* in the first half of the nineteenth century as well as in Meister Eckhart.

This technique seems to have rested on a firm belief in the importance of the individual's experience. It is what a person himself experiences, what he believes, what he feels, what he rejects, that becomes central to this way of thinking, not what experience says to us in general, what tradition or authority has tested, what the *consensus gentium* approves, or even what the bare facts announce. Thus one finds Eckhart condemned for saying, "I have recently thought whether I should like to receive or desire anything from God. I wish to deliberate carefully over this, for wherein I should be a recipient at the hands of God, there I would be under Him or beneath Him, as one slave or servant, and He as a master in giving. And we ought not to be like that in the eternal life."[1] Or again, "We are totally transformed into God and converted into Him. Just as in the sacrament bread is converted into the body of Christ, so I am converted into Him, since He himself makes me one with Him, not like Him. By the Living God it is true that there is no distinction." This was Eckhart's belief, not that of a school or tradition. Apparently it was enough for him that he believed it. To run through the list of his *Errors* is to see an independent mind at work, a mind which is expressing no doubt of its most profound convictions. But the convictions, for good or ill, have no evidence of their truth other than their strength and depth. One tenet of the Reformers was to be the truth of deeply held beliefs. A man's conscience alone was supposed to be his guide, though it must be admitted that few Protestants when organized into sects ever permitted entirely free expression of its dictates. Even the Religious Society of Friends split into conflicting sects, and yet no religious community ever proclaimed freedom of conscience more strongly.[2]

Now there may well be a justification for this cognitive individualism. There are areas of knowledge in which the knower alone is authoritative. The aesthetic experience is closely allied to the mystical in that what one experiences is largely ineffable and is also personal. What a picture or piece of music "means" to John Doe is seldom what it means to Richard Roe, unless Doe has been reading Roe's books and articles. Our knowledge of other people, of their characters, feelings, aspirations, is equally personal. We say that we cannot put our feelings into words; we mean that the words at our disposal are overindividual and hence fall short of expressing our particular feelings. If the subject of religion is to some extent personal, then clearly to that extent it will be ineffable, or, if we try to express it, there will always be some discrepancy between what we say and what others say about it. Moreover, if we believe God to be a person and unique, our only knowledge of Him will have to be immediate, not mediated by words. If we can chant a litany of sacred names and metaphors, we may feel that we are approaching a satisfactory account of our relations to Him, but in the long run it will turn out to be satisfactory to us and only by accident to others. Whatever, then, there may be in knowledge that is private will have to be interpreted by individuals in their own way and according to their own syntax and vocabulary. A strong mystical tradition will always influence men to maintain that this element in cognition is of more significance than those elements which may be public.

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[1] *Enchiridion*, 509.

[2] Cf. Lord Acton's "The Protestant Theory of Persecution" in *The History of Freedom*, 1907, pp. 150–87.

Oddly enough, though not paradoxically, what I have called cognitive individualism is accompanied by a desire to reconcile opposites, harmonize discords, unite in single sentences contradictory predicates. In mysticism the negative theology is justified since no adjective can adequately describe that which is all. For totality comprises both the one and the many, the eternal and the temporal. One loses oneself to find oneself; one knows God by becoming God; one flees from God on God's wings. The trite verses of Emerson's *Brahma* are a magazine of mystical quotations. The mystic's insistence upon his own personal vision leads him to deny any separateness for the simple reason that only by identifying oneself with a unique immediate object can one apprehend it. But if reality can be described only in mutually contradictory terms, then it would seem to follow that the real meaning of things is never on their surface. We apprehend in sensory perception a variety of colors, sounds, smells, textures, and tastes; and, as John Norris said, it is the sensory qualities which differentiate. If reality is an undifferentiated unity, then sensory qualities cannot be accepted as empiricists accept them, but they must be taken as symbols of a meaning that lies beneath them. Moreover, the things of which they are the qualities must also have a deeper meaning and the whole technique of interpreting the natural world as an allegory stands waiting to be used. This was one of the most ancient and most honored methods of Christian exegesis and, for that matter, was not very different in intention from the pagan theory of the macrocosm and microcosm, which had become absorbed into Christianity, and the Stoic notion of the Great Animal. To read purposes into material nature was inevitably to allegorize; and purposes had been read into material nature ever since Plato had written the *Timaeus*. The main contribution of the Christians was to give a Christian interpretation to the natural order. And some of the sixteenth-century German philosophers, like Paracelsus, were adepts at it.

1. Paracelsus

One of Paracelsus' contributions lay in the domain of animating nature. By peopling the four elements with salamanders, sylphs, nymphs, and pygmies, he was able to symbolize the life that was to be found even in the basic material elements.[3] To believe in the unity of the world's substance was not novel. But in seventeenth-century thought it had been based upon matter and the laws of matter. A Telesio could be a substantialistic monist by endowing bits of matter with a dim consciousness, a feeling of the expansion and contraction of neighboring bits. But his basic heat and cold were traditionally nonvital and on the whole his aim was to describe the universe in physical terms. The monism of Paracelsus was the very reverse. To him the basic metaphors must be drawn from living beings, and one extrapolated into the apparently nonliving world the behavior of the living. It should be said that such attempts must always end in failure. To reduce difference to identity is to suppose or demonstrate that the difference appears only to the senses and can be eliminated by reason. But this simply means that one can state the conditions under which the difference will appear. We do not reduce the differences between the various colors to genuine identity by pointing out that each is associated with certain wave lengths and frequencies. Without the wave lengths we should have no colors, except in dreams and afterimages. But we should have none either without eyes and the whole visual nervous system. The waves are, to be sure, homogeneous except in measurement. But the colors still exist and so do their qualitative differences. Similarly even if every last atom or subatomic component is alive, there is still a noticeable difference between the kind of life that it has and the kind of life that we have. As the out-and-out materialist must correlate every phenomenon of the apparently nonmaterial world with material events, so the out-and-out spiritualist, if that is the correct word for him, must correlate every material event with spiritual events, must show purposes in the composition of the atom, or, if not purposes, some other trait that is normally associated with the world of living beings. But even when this is accomplished, the observable differences do not disappear; they are merely correlated or, if one will, explained. But to explain, let us say, a hallucination is not to deny its existence; it is not to identify it with its causes. In metaphysics one of the problems is to find formulas that will apply equally well to all events. That this is a possibility is, to be sure, a methodological assumption. Assumption or not, it is an honorable aim, though none of the formulas discovered to date has satisfied anyone other than its discoverer and his youthful pupils. Be that as it may, the hint which Paracelsus gave that all matter was endowed with life was one of the early sources of later German philosophy.

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[3] The most accessible edition of his "Book on Nymphs, Sylphs, Pygmies, and Salamanders," is that in *Four Treatises of Theophrastus von Hohemheim Called Paracelsus* (Publication of the Institute of the History of Medicine, 2d series; Baltimore: The Johns Hopkins Press, 1941), Vol. I.

One of the favorite devices of Paracelsus was taken over from legendary beliefs that the human being reproduced in every part and organ the parts of the greater being known as the macrocosm. Many of the details of the system could be found in the cabala, and we have already noted the interest it had in the Renaissance for such a man as Pico. But one had no need to learn Hebrew to know that the planets, the beasts, the minerals, and plants all mirrored the life of man. Plotinus had taught the theory of universal sympathy, and astrologers and magicians had utilized it in their operations. But Paracelsus worked out elaborate receipts for utilizing this knowledge and, as far as is known, invented a number of his own. The shapes of flowers and leaves, their habits of blooming, the very names of the planets, were indications of this cosmic sympathy. One had only to know the analogies between things in order, on the principle of the causal relations between similars, to control one through the other. We are not here trying to justify the absurdities of Paracelsus, but simply to point out why they should have had any influence on serious people. And the answer is that he was one of those who industriously set to work to experiment. Out of his neoromantic and alchemical practices came ideas which proved to be stimulating to minds which were more self-critical than his. No historian of science any longer denies the influence of alchemy on modern chemistry. No one would deny the importance of Tycho Brahe in the history of astronomy, though one would be hard put to it to determine whether he should be classified with the astrologers or the astronomers. But for that matter Newton himself spent years on an interpretation of the Apocalypse.

If we are to see the universe as an enlarged portrait of a man, then all of man's nature must be found in it. It must have both a body and soul, and each must have organs or faculties respectively. Since our souls have always seemed nobler and more interesting than our bodies, for reasons which are probably obvious, we shall look for reason and will, goodness, love, justice, or their opposites in the cosmic soul as we find them in the microcosm. The Christian tradition did not encourage belief in a Devil who was as powerful as God, and hence the dualism of the Manichaean tradition pretty well died out, except in the intellectual underground. In spite of the horrors of European history, which only the most naïve could see as the triumph of the good, European philosophers on the whole were optimistic, and it was not until the days when progress, both moral and intellectual, seemed assured, that academic philosophy developed a pessimism. It is understandable, then, that the enthusiasm which the Renaissance had for scientific experimentation should have become widespread. The successes of the physicists, culminating in Newton's *Principia;* of the physiologists, culminating in the work of such a man as Harvey; of the mathematicians, whose successes continue to our own day; to say nothing of the methodological simplifications of Descartes and Bacon, were all of a nature to give men an idea of the possibility of realizing a new order on earth. The alchemists should be given due credit for their contributions to this movement. It is interesting that in such a man as Paracelsus we find an exuberant optimism combined with a theory which justified it. The theory was the vitality of all nature, a dynamic set of forces all working in harmony. The individual had only to understand the operation of these forces to cure himself of all ills, both physiological and mental.

The details of his system are of importance only to the lover of curiosities. The antiquarian will find medical prescriptions, chemical experiments, botanical observations, magical formulas in great enough supply to occupy him for years. But the general drift of his thought, the restless striving for secret knowledge, which Goethe symbolized in the young Faust, and which Spengler in our own time has seen as the heart and soul of culture, never died out of German philosophy.

2. Boehme

Since we cannot give an account of all the sixteenth-century German mystics, but must choose one whose influence was pre-eminent, we shall concentrate on Jacob Boehme (1575–1624). For Boehme was read not only by his compatriots, but also by many Englishmen, and the effect of his writings was especially great among such religious groups as the Society of Friends.[4] Moreover, Boehme is a typical mystic of the period in question; his works are easily procured in most libraries; and he was probably more widely known than such fellow-mystics as Franck, Schwenckfeld, or Weigel.

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[4] The late Rufus M. Jones, in his *Spiritual Reformers in the Sixteenth and Seventeenth Centuries,* 1928, devotes four chapters to Boehme. For his fame, see p. 153, n. 1.

Before entering into the details of Boehme's thought, it should be pointed out that the desire to *see* ideas, rather than demonstrate them through inference, to see them as one sees pictures or natural objects, was common to many people in the sixteenth century. It must not be forgotten that this was the period of the greatest popularity of emblem books and that the philosophic thought behind the production of emblems was undoubtedly that expressed by Plotinus (*Ennead V,* ch. viii, 5–6) to the effect that the Egyptian hieroglyphs were Platonic ideas in concrete form. When Ficino came to translate this passage, he added a gloss referring to the *Hieroglyphics* of Horapollo for an instance of what Plotinus is saying.[5] The emblem books contained short poems of an allegorical nature on Justice, Eternity, Love, and the like, illustrated with "hieroglyphs" in this special sense of that word. It was believed that the wisdom acquired by such seeing was of a higher type than could be attained through discursive thought. But men like Paracelsus and Boehme also believed that every item in the cosmos was also a hieroglyph and also had a significance which could be seen by the eye uncorrupted by scholarship. The peculiar power of the eye in normal vision was that of coming into contact while remaining at a distance with its objects. This paradox was not such as to alienate mystics. Vision gave one knowledge, or at least so it seemed, gave one immediate knowledge, and thanks to the ambiguity of the term "vision," was a paradigm of the best and truest knowledge. There may have been here an echo of an idea which some of the ancient Neo-Platonists had dwelt upon, that in sleep the soul is freed from the body and sees directly the Platonic ideas.[6] What one sees in a dream is obviously a concrete pattern resembling in looks, if not in behavior, the things of waking life. But the tradition that dreams and visions, in the prophetic sense of that term, had meanings which were not those of their surface appearance, was still strong in Boehme's time, and if one intertwines all these various currents of belief, one finds ample justification for his interpretation of the physical world as an emblem of a spiritual world.

Boehme's basic metaphysics was derived, as was inevitable, from certain scriptural texts. The God of the Bible was for him pure

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[5] For something of the history of this idea, see the introduction to my translation of Horapollo. See also E. H. Gombrich, "Icones Symbolicae," *Journal of the Warburg and Courtauld Institutes,* Vol. XI (1948).

[6] See especially Priscian's *Solutiones ad Chosroem,* iii (ed. *Bywater)* in Suppl. Aristotel., p. 63, lines 11 ff.

Being. The Scholastics had made much of the text, "I am that I am," and Boehme followed them in this. Being is the ground of all existence, as well as of all intelligible beings. Being is beyond time. All things "are originally sprung and derived from eternity."[7] But Being or God is not as characterless as His name would suggest. On the contrary, He is essentially a will which produces all reality, presumably as the One of Plotinus was the source of all things by its own overflowing fertility. But where Plotinus uses the figure of the burning candle, Boehme is more likely to use that of the tree which shoots out branches and twigs, for he wishes apparently to interpret the world as a living being. Since the activity of growth does not seem to be simply the absorption of matter from the external world, a swelling of volume into space, but the result of an inner impulsion, the metaphor of the growing plant was as useful as that of the candle and had the added attraction of bringing the divine creativity closer to human beings. The active will of God is, as Kant's Practical Reason was to be, a cognitive instrument. Reason and willing were two names for the same activity, but when the eternal will is thought of as reason, it is called Father. What it grasps in its vision, for reason must have a subject matter, is the Son, the Word of Life, which is identical with reason though differentiated in words. For a rational will by its own creativity wills something; it is, so to speak, self-conscious and creates its own self-consciousness out of itself, like Milton's "bright effluence of bright essence increate." The Son, let it be said for the benefit of Boehme's own texts, is usually represented by a heart. From the eternal reason and what might be called the plan of the world, comes the outer vision of both, which is the Holy Spirit. Thus, what becomes manifest to us humans as the visible universe is God, and the texts which state that all things are in Him and that in Him we live and move and have our being become absorbed into metaphysics.

When Boehme speaks of magic, as he frequently does, he means creation simply through an act of will. He thinks of desire on the naturalistic plane as a yearning for something which does not as yet exist; but on the supernatural plane, as a yearning for something which is there present in eternity. But when all things are together as intelligible, not sensible, beings, there is no gap between them and hence desire and its objects are really fused into unity. Magic could be thought of as the illumination of an object present but concealed, and the fulfillment of desire would then become the creation of its object. This is expressed by Boehme in the symbol of the hidden fire which flashes out at certain times. The burning heat of love is an impulsion toward an object, but the only spiritual object possible of attainment is oneself in God. Desire is also the creative force in nature. It exists in two forms: a contracting form which individualizes, separates, breaks the continuum of being into pieces; and a kind of anguish which follows upon this and bursts into freedom. Hence follows the plurality of the world, time and change, a ceaseless spinning upon a center, accomplishing nothing beyond itself. The two realms of beings are, in ordinary parlance, God and Nature.

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[7] *The Forty Questions,* I, 4. We shall base our discussion on this book and the *Six Theosophic Points* in the main. But since the language of these works adds nothing to the clarity of the ideas which it is supposed to express, we shall use our own language and apologize for citing no specific passages.

But such a duality will not do, for Boehme must correlate all things with the three Persons of the Trinity. Consequently, he posits a third being to inhabit the world of nature, and that being is derived from the Neo-Platonic Soul of the World. The Soul of the World manifests to us the wonders which were implicit in the being of God. This was not the first time that a correlation between the *anima mundi* and the Holy Spirit had been made; indeed Abelard had been condemned at the Council of Sens in 1140 for identifying the two. But Boehme was a Lutheran by birth and education and could not be expected to remember and profit from the errors of such predecessors. The cosmos could not simply come into being as an inert mass of matter. It, too, must have its life, and the only way it could have it was by the possession of a soul of its own, identical in substance with God. Since there is evil as well as good, anguish as well as joy, life as well as death, our task on earth is to recognize the spirit which animates our world, and we do this by seeing that there are three principles at play here: "the fire of the will, the fire of desire," and the child of the two, which he calls air. It differs from the first two principles in that it has a beginning. "It is a manifestation of the Eternal, an awakening, image and similitude of the Eternal." [8] Since Adam was made in the image of God, we find in him corresponding characters: he has within him a fiery will, an external body, and life which is an interplay of the two. Man's total being is a representation on a small scale of the eternal being, and the battle between his will and his anguish arises from his awareness of what he really is. Whether one is sickened by Boehme's unscientific rendition of metaphysical problems or not, one cannot lightly dismiss this account of the human drama. For here is a man sensitive to the puzzle of existence and trying to solve it as a cosmic puzzle. The old question of why God created the world is reproduced in the question of why men live and reproduce, desire, contemplate, suffer, and seek an escape from suffering. In other words, one can see in Boehme a man who starts with the human problem and attempts to construct a philosophy in which it will have significance beyond the frontiers of human life. The tradition in scientific circles had been to treat of human affairs as a postlude to physics. That tradition was to end in a reduction of human desires to effects made upon the human body by purely material forces and if not inevitably, at least usually, to see nothing of cosmic relevance in them. The Hebraic-Christian tradition had a solution ready at hand which was neither presented in rational form nor normally submitted to rational treatment. Boehme accepts the biblical statement and then attempts to organize it as well as he can by interpreting it all as a cosmological allegory. Man is the center of his system, as he is of his world. And if man is engaged in the battle between good and evil, desire and joy, then those forces must also be discoverable on the cosmic scale. He is forced to turn to such phrases as the light-world, the dark-world, since he is writing out a vision, not a deductive treatise. He is, in the last resort, a child inventing a philosophy of his own. And I suppose that the extraordinary charm of his writings came from its childlike quality. If it terminates in something antithetical to Cartesian clarity and distinctness, it atoned for its obscurity in its tremendous suggestiveness, the same kind of suggestiveness which appears in the writings of Saint-Martin, William Blake, and Kierkegaard.

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[8] *Six Theosophic Points*, I, 15. I am using Rolleston's translation, 1919.

That in God's very being there is an implicit battle which eventuates in the physical world does not mean that there can be no victory. Life is indeed a battle in which many wills are in conflict, says Boehme, but by obedience to Light, that is, to the spirit of God the Father, which in common-sense language means order, peace will ensue. It is interesting to observe how in Christian language Boehme restates the ancient Greek idea of following Nature. Neither Greek nor Christian had a very clear idea of what following Nature consisted in, but both seemed to find in the natural order a clue to human welfare. For the typical Stoic, reason would have been the guide. For Boehme it was also reason, but such reason as the post-Kantians were to call "intellectual insight." Boehme's insight was visionary. He always insisted that he wrote under the dictation of the divine spirit, as he believed all prophets did. But his constant appeals to natural science as a description of the regularities of the good life were not discordant with the Stoic methodology. His insistence upon meekness and humility, as against pride and covetousness, is the traditional Christian insistence upon resignation to the Will of God. Though one should never be too sure that Boehme's meaning is grasped, for his style is so illusive that several interpretations are always possible, it is nevertheless likely that he found in the individual's consciousness of his identity with the divine spirit the possibility of salvation.

The reason that is in God is not for Boehme that which we call reason. In his *Theoscopia,* written in 1622, he makes that clear. In that work human reason can deal only with the temporal world and is incapable of entering into God's own nature. It is what Kant was to call *Verstand* as distinguished from *Vernunft,* and the distinction was to be fundamental to early nineteenth-century philosophy in Germany. The nature of God is such that no cognitive instrument adjusted to the exigencies of the spatiotemporal world could hope to understand Him. Only a kind of intuition could penetrate to the eternal world. But in Boehme the reason can correct its errors by forsaking its natural life and returning to its supernatural source. It may by an act of will see that its operations depend entirely on the existence of multiplicity and contrariety and that the multiplicity and contrariety can be nothing more than differentiations of an original unity. The various colors are differentiations of light, the various tastes differentiations of a single gustatory faculty.[9] Human reason can see this and can therefore turn back to the undifferentiated, and ultimately to God. This is possible since all things flow from God's unity, so that the scale of beings duplicates the scale of ideas—from particular to general and back again. One might ask Boehme why multiplicity was any worse than unity, and his only answer would be that it is the occasion of strife. A division among wills is in itself conflict, he maintains, and utilizes the self-evident evil of conflict to urge men to return to unity. This longing for peace is not without its pathos, and one has only to read the simple story of the persecutions which Boehme underwent at the hands of the godly to appreciate its pathos. If he were attempting, however, to state a straightforward rational account of his philosophy, he might justly be asked to give reasons for being so opposed to strife. But he has no such pretensions and is setting down his visions, not a deductive system.

The interplay of opposites resolved in a third thing, or ground, runs through his system. For instance, in the *Clavis,* written as a summary of his philosophy in 1624,[10] he has a section on the "seven properties of nature," in which each property is symbolized by one of the planetary signs. But instead of arranging them in the usual astrological order of the planets, he puts the sun in the center, flanked by Mars and Venus, Mercury and Jupiter, and finally Saturn and the Moon on the extremes. Thus the most remote and the nearest are the extremes, and each of the others is placed against its supposed antithesis, Mars (strife) against Venus (love), Mercury (the bitter sting of desire) against Jupiter (noise with sound). Not only that, but each astrological sign is coupled with its antithesis as the property which it symbolizes is described, so that the signs for each are double, Saturn-Moon, Mercury-Jupiter, Mars-Venus, Venus-Mars, Jupiter-Mercury, Moon-Saturn. The six planets grouped round the sun also form two worlds, a dark and a light, with the sun symbolizing what he calls the Fire-world, being of dark fire and light fire. The dark world is symbolized by a candle which is not burning; the fire-world, in the candle's fire; the light-world, in the light which emanates from the candle. And similarly the dark world is God the Father, the angry jealous God; the light world is God the Son, the Word, loving and merciful; and out of them comes the world of the four elements in which light and darkness, good and evil are mixed. The table is an attempt to present visually a great synthesis of opposites; it is a verbal presentation of a pictorial emblem which is the emblem of all being.[11] The technique of presenting synoptic views of philosophy was common at the time and was fortified by the success of such men as Pierre de la Ramée with their mnemonic schemes. But it also manifested a great faith in the mechanical neatness of the universe, which was thought of as a balanced pattern, a sort of clockwork in which all wheels and cogs fitted together. For though a man like Boehme insisted upon the vitality of the cosmos, the volitional side of the soul rather than the contemplative, yet he seems to have been as seduced by the mechanical model as Descartes.

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[9] These are my illustrations, not Boehme's.

[10] Printed in the same volume with the *Forty Questions of the Soul,* Sparrow's translation with emendations by D. S. Hehner, 1911.

Much of the influence of Boehme must have come from the very vagueness of his thinking and the relative novelty of his terminology. The date of his major work, *Aurora,* is 1612, which is earlier than the dates of either the *Novum Organum* of Bacon or the *Discourse on Method* of Descartes. He was thus as much a pioneer as his more eminent contemporaries and, when one is a pioneer in philosophy, one is forced to invent a terminology. Moreover, when he needed scientific data, he had to find them in the scientists whom he had at hand, and the nearest approach to one was Paracelsus, from whom he took over the doctrine of the three kinds of substance: mercury, sulphur, and salt. Again, the only philosophical technique of which he was aware was that of the German mystics, who made the start of philosophizing the personal insights of the philosopher. This had something, though not much, in common with the procedure of Montaigne and Descartes. His greatest influence was upon the men who were seeking for religious authority within the individual rather than within the organized tradition of the Church. His works were translated into English in 1645 and seem to have been eagerly read by men who were looking for a center of illumination within themselves. Their justification was their belief that faith that was founded simply on the word of others was worthless and indeed hypocritical. They believed firmly that God could still speak to His children as He had in the ancient days of the prophets. Boehme seemed to them to show how this was possible by clarifying the image of God that was in every one of us and demonstrating the spiritual affinity of man and the cosmos. This never died out of German philosophy, and it is for this reason, if for no other, that the historian of philosophy should give Boehme his fitting place as a transmitter of a way of thinking which became more and more disciplined as it passed through Leibniz to Kant and from Kant to the Post-Kantians.

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[11] Those interested in such tables should also see the Figure of the Philosophic Globe, or Eye of the Wonders of Eternity, or Looking-Glass of Wisdom, between pp. 44 and 45 of the *Forty Questions.*

3. Leibniz

Against a background of mystics and alchemists there emerges the figure of Gottfried Wilhelm Leibniz (1646–1716), a younger contemporary of Locke and Spinoza. He came at a time when the *Novum Organum* and the *Discourse on Method* were widely known and when the scientific work of Huyghens, Boyle, Newton, Leeuwenhoek, Pascal, and Fermat was being elaborated. It was quite a different intellectual atmosphere from that breathed by Boehme and, since Leibniz was a man who read and traveled extensively, who corresponded with all the eminent scientists and philosophers of his time, it is to be expected that the general tone of his thinking would be more rationalistic than that of his predecessors. Yet certain features of their thinking remained with him, whether he retained them consciously or not.

Though it is customary at the present time to discuss all of Liebniz's work as a single body of doctrine, and to utilize documents which were not published in his lifetime, the historian of philosophy would do better to follow the custom of the past and deal mainly with those books which could have been read by his contemporaries, such as his *Theodicy* and his *Monadology.* His unpublished fragments, his letters, his state papers may be left for his biographers. We must deal with the Leibniz who was known to the general philosophic public of his time, and obviously that public did not have access to documents which were in the hands of either private individuals or chanceries.[12]

Among the presuppositions of Leibniz were some that were common to most of his contemporaries and which raised the central problems that their thinking strove to solve. These were: (1) The existence of two worlds: that of perfect intelligibility, necessary consequences, identified with the mind of God; and that of contingent events and accidents, identified with that encompassed in human experience. (2) The eternality of the former in the sense of timelessness, and the temporality of the latter. Timelessness was the differentia of formal systems of thought, mathematics in particular; they are supposed to be true regardless of when and where their subject matters may be exemplified. But experience is temporal since every experience occurs at a given date and place, and what is true of it as a dated and localized occurrence is true of it only then and there. (3) In spite of this the temporal world somehow or other exemplifies the eternal world and theorems of the latter may be applicable to events in the former. (4) The eternal world is unified, not merely as one substance, the mind of God, but also as a formal system of ideas, the posterior ones being implied in the prior, and presumably all could be reduced to one idea, though no one could do more than name it. The names usually assigned to this supernatural idea from which all others emanated were the Ground of Being, Pure Being, the *ens realissimum,* the most perfect being, the *Ungrund,* and the like. Since it is identical with the mind of God and since human knowledge has always been held to be some sort of image or reflection or expression of its objects, it is impossible for us to have an adequate idea of the mind of God, and hence, we cannot be expected to express its nature in a sentence. The temporal world is the very opposite of this, for it is, above all, characterized by multiplicity—multiplicity of substances, of natures or kinds of things, of individuals completely differentiated from one another. There were, to be sure, some who followed the lead of St. Thomas Aquinas and held that position in space was the differentiating factor, that all members of a class were alike except for their spatial position.[13] Human souls were the one exception to this. But by the sixteenth century more philosophers followed the lead of Duns Scotus, who asserted that every individual had what he called *thisness* (*haecceitas*) and that its individuality could never be completely resolved into a class concept. Though the terminology would be anachronistic, he could be said to have maintained that each individual was a class of one member. (5) Causality was a relation between similars, so that all effects must possess some character or set of characters which had previously existed in their cause. We have already seen this assumption at work in the philosophies of Descartes, Spinoza, and Malebranche, to say nothing of Locke, Berkeley, and Hume. In the eternal world causality has an analogue in the necessary connection of logical implication, and where the effect was said to have a character passed on to it by its cause, the deduction was said to be contained in the premises. The major problem of explanatory science was to discover that set of propositions which would adequately represent or symbolize or express the causal connection of events. (6) The human mind possesses an inner or natural light, an intuition, of those truths that are called self-evident. Just what these truths were was a matter of dispute, just as whether they were innate or not was also. But there are certain laws of thought, as we have seen, such as the law of contradiction or of identity, which were necessary if there were to be any logic at all. Since by assumption 3 the temporal world was intelligible, and intelligibility was logicality, logic had to be possible. Besides these metaphysical assumptions, which could also be thought of as procedural rules, there were certain beliefs about the nature of God, such as His goodness, perfection, omniscience, and omnipotence which played various roles in the various philosophies.

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[12] P. P. Wiener has recently published a short anthology of Leibniz' writings, including both those which he left unpublished and the more usual pieces, in *Leibniz Selections* (New York: Charles Scribner's Sons, 1951). This is an invaluable adjunct to the study of Leibniz since many of the translations are new or revised, and the selection has been very judiciously made. Wherever possible references will be made to this volume.

The union between the two worlds, that of intelligibility and that of contingency, was provided for by Leibniz in the Principle of Sufficient Reason. This Principle was not merely the assumption that all events could be best explained by discovering the divine purpose which they fulfilled, but also by discovering their efficient cause, or by deducing their occurrence from some logical premise in which their occurrence was implicit. When he says that nothing happens without a reason (Wiener ed., p. 93), he explains that statement to mean (1) that true propositions, unless self-evident, can be proved as the consequences of other true propositions; (2) that nothing happens without a cause; (3) that sometimes this cause is the attainment of a purpose; (4) that frequently this purpose is God's rather than that of the effect under discussion. In all these cases the sufficient reason is that without which the effect would not occur, so that Leibniz eliminates the possibility of chance events in the sense of events without assignable cause or purpose. Unfortunately the sufficient reason for many events is unknowable to mankind, being part of the plans of God, but that there is such a reason was an article of faith in Leibniz's system.[14] Though he believed that even in physics one had the right to appeal to final causes, he was more inclined to apply his principle in explaining contingent events occurring within the sphere of human behavior. But, even in that admittedly limited sphere, a purpose was not simply anything that some mind wanted to do. God Himself made His choices with deliberation and decided on A rather than B because A was better in some sense than B. The sense might be simply that to do B would be incompatible with a further course of action which itself was justified. But the divine Providence could see this in a flash and, though temporal terms are misleading when used in reference to God, before He made the world He foresaw what the compossibles were. It is as if a human being were looking forward to building a house, laid down his requirements, surveyed his material means of accomplishing them, and then realized that some details of his plan would have to be revised if he were to stay within his means. This is the homely example of a work of art as a compromise between idea and the restrictions of matter, or the even more homely example of not attempting to eat your cake and have it, too. I trust that the resemblance of this concept of God as both a will and reason, or as a rational will, to that of Boehme appears clear.

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[13] It is often said that, for St. Thomas, matter was the principle of individuation, but, in fact, he was thinking of *materia signata,* which is localized matter.

The sequence of theorems in geometry or any other formal system is analogous to the temporal sequence of events. Causality is envisioned as logical implication. But in the latter there must be nothing in the conclusion which was not previously in the premises, and Leibniz assumed that all formal reasoning was based upon the Law of Identity, a notion that was to reappear in Schelling. That the same thing could appear in different form and yet retain its identity was a central point in Leibniz. It may well have been derived from his ideas about resemblance. Two things are said to resemble each other when they possess a common property, but the common property need not be a sensory quality; it may be an arrangement or pattern or even obedience to an identical rule or law. But all things in the universe may be said either to obey the laws of God or to follow from the nature of God's will. But ordinary causation, in the sense that the cause transfers one or more of its properties to the effect, cannot be explained logically. We can describe the causal series but the description remains an empirical generalization. If, however, there is a general law that is exemplified in the behavior of all separate things, then they all have a resemblance and a kind of identity. The microcosm resembles the macrocosm in this way, for every item in the latter is reproduced in the former, and we can therefore deduce how the former will behave from the behavior of the latter. Leibniz simply atomizes his universe into an infinite number of microcosms, which he calls monads, or units. Since he believed in the actual existence of infinites, and a mathematician would be hard put to it to deny them,[15] and, since there was nothing to limit the number of monads which God might create, he asserted that the number of monads was infinite. But not only was their number infinite, so also were the degrees of difference between them. Each monad resembled God in a way which we shall pass on to immediately, but the resemblance was one that admitted of more and less.

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[14] The best explanation of the principle of sufficient reason which I have found is in A. O. Lovejoy, *Great Chain of Being* (Cambridge: Harvard University Press, 1936), ch. v.

The difference that Leibniz assigned to the monads was that of the clarity with which they reproduced that monad which was God. As God was a rational will, so each monad must be one, too, but some might have more obscure purposes and perceptions than others. And since volition was a force, force, too, could vary in intensity. Hence it was theoretically possible for there to exist a series of monads ranging from clarity and forcefulness close to zero to a monad of infinite and perfect clarity and power. And since in his thinking all compossibles must be realized, by what Lovejoy has called the principle of plenitude, the series of monads must exist. There was nothing inconsistent in the reality of the whole series, and in a logical universe the consistent is the possible. But such units of rational will could not have parts, lest the parts be in conflict with each other. And since they were units they must come into existence as wholes, which meant that they could only be created out of nothing: fabrication, as contrasted with creation, being composition of previously existing materials. But, similarly, nothing could enter into them or go out from them; they were, in Leibniz's famous phrase, windowless. Whatever changes they manifest must be internal and these changes he calls perceptions. At this point in the development of his system, Leibniz argues that perceptions cannot be produced by purely mechanical means. He asks his readers to imagine the mind as a great mill in which wheels and belts are moving together. If we were to enter this mill we should see nothing but mechanical motions, belts moving wheels which would move other wheels. But nowhere could we find anything resembling a perception. Perceptions consequently must belong to the monads' internal natures, and, if we wish to say that all perceptions must be possessed by souls, then we shall have to conclude, as Telesio did with his tiny corpuscles, that the monads had souls. But perceptions may be so dim that we are not aware of them. The rustling of leaves on a tree is compounded of the rustling of each leaf and yet we are aware only of the sound of the whole. Had Leibniz been able to admit gaps in the universe, he might not have been pushed to this point, but for him the world was a continuum. We are accustomed today to unconscious thought or subliminal stimuli, so that his conception of perceptions of which we are not aware individually may not seem so strange as it did to the seventeenth century. But strange or not, the theory of *petites perceptions* logically followed from his premises of continuity and the self-enclosed monads.

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[15] Especially one who had discovered and elaborated the calculus of infinitesimals.

This still left him with the problem of causality on his hands. If the monads had no windows, then one could not influence another. Yet the whole world seems to move in accordance with the causal law. Leibniz could not have given up the causal law and merely asserted that the uniformity and apparent causality were illusions, or followed the lead of Malebranche and introduced the intervention of God at each moment of apparent causation. God's omnipotence was limited from the human point of view to accomplishing the possible, which meant the compossible; and, if creation emanated from His power, then whatever happened was determined by the divine nature or will. Since this will is a rational and not a capricious will, occurrences from God's point of view are logically necessary. This logical necessity is reflected in the inner nature of each monad which, as we have said, is a more or less perfect picture of the whole. Hence the best interpretation of the orderliness of the universe is that it was so created from the very beginning as to manifest order and regularity—an interpretation which Leibniz called pre-established harmony.[16] Again, a certain dissatisfaction was expressed by Leibniz' contemporaries over this, for it seemed merely to put a question in declarative form and call the new sentence an explanation. But in reality it is part and parcel of the total system. The logical necessity of God's mind must be reproduced in the little images of God's mind; and, since causality was an image of logical necessity and nothing more, whether one called causality a pre-established harmony or the-way-facts-are was of no importance except to men of religious inclinations. To them every event could be seen to have religious significance, and the old belief in man's being an image of God took on new force. It was clear to Leibniz that we could not always discover the reasons why things were as they are, but we could at least be guided by the principle that no occurrence is in itself a surd. The universe had already been sufficiently explored by astronomers and physicists to manifest a kind of intelligibility which few had done more than suspect before the Renaissance. No one at the end of the seventeenth century could soundly predict the extension of such intelligibility to all fields of human investigation. But they could give philosophic, if not scientific, reasons either to push ahead or to stop. Leibniz's extension of the old macrocosm-microcosm parallelism induced men to continue. The traditional views of causality had been too hard hit in philosophy to be accepted in their literal form, though they still influenced scientists. As we have seen, Hume was to give them even harder blows after the death of Leibniz. Leibniz, however, gave a new interpretation of what was happening when causes seemed to be in operation, and pointed out the possibility of rational explanations of their operations. Regardless of his own adventures in physical science, his influence was to direct men to philosophical interpretations of natural events. For causality seemed more and more clearly our human way of expressing what was in its own nature a divine purpose. What we must insist upon is his refusal to state this as a bare expression of religious piety and his insistence on its rational basis.

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[16] Cf. Norris's theory of the Law of Union between Body and Mind.

Voltaire's *Candide* is a gross parody of Leibniz's theodicy. Leibniz was far from being the first philosopher to justify the ways of God to man, but he was one of the first to do more than simply urge resignation. He overtly opposed the Quietist doctrine, for he believed that our wills were free to choose and to reject. We cannot modify the laws of nature and we have to operate in obedience to them. Thus our choices are limited and common sense would agree. But choice lies within the realm of ideas, and insofar as we are rational, we can foresee the consequences of certain ideas and decide whether or not we wish to realize them. Moreover, the fact that a wish fails of realization is not proof that it was not freely made. Man might be described as an animal who desires the impossible; and, when he does, he certainly will not obtain it. Yet he is free to desire it. A rational man will understand when one of his desires is impossible of realization and will presumably do nothing to realize it. Only a fool would attempt to breathe under water, no matter how much he may hanker after the life of fishes and mermen. Leibniz was not writing about fools. For him the will and the reason are as closely associated as they are in God, the only difference being that our will and reason are not so clear as those of God. That our rational wills are free in the sense that by their very nature they can foresee consequences, compossibles, impossibles, without doing more than reason, and that logical consequences are, so to speak, autokinetic is never disputed by Leibniz, for how indeed could it be? We reason within the confines of the laws of thought, but those laws are of our minds, which in turn are reflections of God's mind. That freedom in the last analysis is freedom from external restraint but not from ourselves is a doctrine which was to survive in Kant and the post-Kantians. In fact, whatever it sounds like verbally, in what sense of the words could one be free from the restraints of oneself? And, since we mirror the nature of God, when we act rationally we are acting, according to Leibniz, in harmony with God's reason and will. But no one could demand more than that.

When we see this, we also see that some evil is unavoidable. If we are foolish enough to want the impossible, then our inability to get it will be evil. If we want two things that are incompatible, then the failure to get one of them will be evil. A general, says Leibniz,[17] will prefer a great victory with slight wounds to defeat without wounds. So much could be granted without troubling the feelings of the least philosophical. But the question still remained of why God did not create a world in which there was no evil whatsoever. And here Leibniz had to fall back on an abstract argument which satisfied only a few disciples. That argument was that, if it had been possible to create a world without any evil whatsoever in it, God would have done so. The problem was to create a world in which all compossibles could be realized. Since He is perfect he could not have chosen to make a world which was not as good as possible. Therefore, of all the possible worlds, the one which He has chosen to make must be the best. This solution was all very well in theology, but some of the necessary evils seemed hard to bear. The Lisbon earthquake, which was followed by a tidal wave killing 1500 persons, seemed to Voltaire an understandable natural event, but not an understandable visitation from a beneficent God. What comfort was it to the families of the victims to tell them that if God could have made a world without earthquakes and tidal waves He would have done so? Leibniz' answer is not very different from that of Epictetus to the slave with the broken leg. Your leg is broken as a result of natural forces; therefore accept it with apathy unless you would wish the laws of nature to be suspended just for you. Unhappily most people do want the laws of nature to be suspended for them; prayers for rain in time of drought, for miraculous cures, for divine intervention whenever the pleader thinks his cause justified—and what pleader ever thought his cause unjust?—would certainly seem to show that acceptance of the universe is neither normal nor even to be expected. Moreover, the acceptance of evil sometimes leads to a flat refusal to reform anything whatsoever. At what point is one to say that an evil is inevitable and hence irremediable? Leibniz' answer, and it is not a bad one, is that reason can tell. Tidal waves and other natural disasters may be inevitable. But one can foresee their occurrence and take certain measures against their consequences. Death, too, is inevitable, but its occurrence need not be hastened. Where Leibniz was weakest was not in his explanation of why God permitted evil but in his insistence that evil itself, when considered as an item in the larger scheme of things, may turn into good. Basically the problem arose from the identification of values with fact, the accommodation of what was called the realm of nature to the realm of grace. But it took many years before philosophers would refuse to attempt the accommodation, and to this very day most philosophers feel the need to base our values upon the laws of the universe. They perform the operation by reversing the order and making the universe a mirror of grace.

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[17] *Theodicy* (abridged) in syllogistic form, Wiener edition, p. 510.

One of the most persistent features of Leibniz' philosophy in its later embodiments was the theory of the windowless monads. That the soul of man is enclosed in a shell from which there is no escape, that his very individuality is a sort of prison, that in no real sense can he be influenced from without, seems to have had great charm for German philosophers up to at least the time of Hegel. Whereas the French philosophers tended to emphasize the common nature of mankind, whether this lay in his reason or in his feelings, and whereas the English played upon the theme of common happiness, the German was more likely to accentuate man's essential loneliness. The Ego sat in solitary confinement striving to attain a goal which no one else could understand except inadequately. The double standpoint, which appears somewhere in all theories that recognize that man has both a soul and a body, in Leibniz, Kant, and the post-Kantians, turned into a kind of egocentricity in which the human Ego became the archetype of the World-Spirit.

The result might be the moral grandeur of Kant's Practical Reason acting as if it were the universal reason; of Fichte's Ego creating a world in order to overcome it; of Schelling's Ego, which is but the counterpart of his material world; of Hegel's Spirit, whose moments of development determine the nature both of science and of the world which science describes; or even of Goethe's Ego, now restlessly and tragically binding himself to diabolic slavery in order to arrest the flow of time or to contemplate the universe in Olympian disinterest, like the gods of Lucretius. It reaches its heights in Nietzsche, who makes his Zarathustra declare that God cannot exist, because if He did, "I could not bear not to be He." If the French and English philosophers tended on the whole to recognize the duality of soul and body, Ego and others, in less melancholy ways, they also tended to overlook the tragic fate of human beings who, "seeking the spheres to connect them," sometimes launch themselves into the abyss. The hold which the mystic tradition had over the Germans, combined with the encouragement which some forms of Protestantism gave to this tendency, may have been responsible for this emphasis on the individual's solitary quest for enlightenment. One is always on dangerous ground in assigning causes of this sort to great philosophic movements, and we do no more here but throw out a hint that may be of some value.

Though Leibniz set up an intellectual model upon which the temporal world could be thought of as a series of reproductions of the eternal, and in which causality mirrored logical implication, he never succeeded in showing how the temporal order in any way was even a dim picture of the eternal. The order of events might be said to be like the order of ideas, but there was no succession in the eternal world, where all ideas were a *totum simul.* Time therefore was thus relegated to a position of such slight importance that it raised no problem in Leibniz' mind. Lovejoy has shown how the principle of sufficient reason was inconsistent with the existence of time.[18] This is not merely due to the fact that no existence logically follows from any essence, though ontological proofs of the existence of God were supposed by some philosophers to exhibit one exception to that rule, but the nature of time is antithetical to the nature of eternity. For though no one could deny that human beings drew out inferences from a set of premises one after the other in a temporal order, this order was not the logical order, nor were they supposed to subsist in their own logical world in a temporal order. On the contrary, they were supposed to be all implicit in their premises; and the Divine Mind was held to see all premises at once, just as expert mathematicians and logicians were supposed to see at least some simultaneously. But the exemplifications of logical principles are also found to occur in a non-logical order, axioms being discovered after theorems, instances before that of which they are instances. One can speak of the logic of history in only a metaphorical sense, and to this day people have looked in vain for any general principle which will describe the course of events. We may correlate time's passage with the increase in entropy and even imagine systems in which the second law of thermodynamics is—at least within a closed system—reversed. The mere fact that there exists a logical order and a temporal order does not suffice to permit us even to call time the moving image of eternity with any seriousness. For what is it an image of? In Leibniz the discrepancy between the two realms was even greater since he believed that the Law of Identity was the basic law of reasoning and also that it was logically possible to move from effect to cause as well as from cause to effect. Regardless of the logical difficulties involved in these notions, in the temporal world we obviously cannot move in both directions. When we see an effect we may perhaps infer what its cause was, but that does not mean that we have actually moved backward in time. Now Leibniz knew, and he would have been very stupid not to have known, that sometimes accidents happen to prevent the effectiveness of a cause. It was indeed in such cases that he saw the necessity of invoking the Principle of Sufficient Reason, or at times to invoke a final cause as the sufficient reason.

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[18] See A. O. Lovejoy, *The Great Chain of Being,* p. 151, and especially p. 154: "From the eternal logical necessity belonging to an essence there is, in truth, *no* valid argument to any conclusion about existence in time. For time itself is alien to that necessity; it is an alogical character of nature." See also p. 329.

No account of Leibniz' position in the history of philosophy would be complete without some reference to his refutation of Locke's epistemology, which appeared in his *Nouveaux Essais sur l'Entendement Humain.* For herein we find more clearly stated the germs of Kant's first *Critique.*[19] The mind, he maintains *(ed. cit., Essai,* Bk. I, ch. i, 21), can discover its innate ideas by reflecting upon its own operations. It will then see that whenever it reasons at all, it utilizes certain logical principles of which it is not aware when not reflecting. It is these principles which make certain and absolutely true knowledge possible. They are, of course, as the English Platonists had also pointed out, the laws of logic. Such ideas are innate, not in the sense that all people, savages, children, and

[19] These germs were already present, as Leibniz saw, in the works of the English Platonists.

idiots, are aware of them, but in the sense that without them no thinking is possible. Leibniz (*ed. cit.,* Bk. II, ch. xxix, 13) makes a sharp distinction between an idea as an image—the sort of thing one becomes conscious of in perception—and an idea as something that may be true or false. One may have, he says, an image of a geometrical figure without having anything more than a confused idea of its geometrical properties. This would seem to be founded on fact, inasmuch as people ignorant of geometry cannot be doubted to have perceptions of circles, triangles, and other such figures, without knowing anything whatsoever of Euclid. Contrariwise, he maintains, a mathematician may have a clear and distinct idea of a geometrical figure without any image of it. He cites the standard case of the chiliagon whose properties a geometer could state with precision but of which he could have only a very inadequate image. If ideas are not images, then there is no need to explain their origin by the impact on the body and ultimately on the brain of material particles. One need not consider images as more than the occasions (*ed. cit.,* Bk. I, ch. i, 11) upon which we have the possibility of knowledge of truths. This, it will be recalled, is an older Platonistic theory. Truths, then, are not ideas in the sense of percepts or images, but are ways of thinking; the terms he uses are habits and aptitudes (*ibid.,* 26).[20] There are, moreover, certain ideas which by their very nature could not come from sensation; such are: being, substance, unity, identity, causality, perception, and reason. These presumably could arise only from the mind's reflecting upon its own processes of thought in which such ideas are necessary. It is in this sense that they, along with certain others, such as the idea of God, are innate. That the mind can discover its own necessary modes of thinking by reflection and independently of experience is a cardinal thesis in Leibniz' epistemology and was to be similarly a cardinal principle in the whole philosophy of Kant. It is this which gives meaning to the famous reply to Locke, "Nothing is in the intellect which was not previously in sensation except only intellect itself" (*ed. cit.,* Bk. II, ch. i, 2). This opened the way for an examination of the categories both of perception and of the understanding. If such categories were discovered, the conclusion is possible that they correspond to nothing in the external world but are projected into it by the mind as if they were directly observed.

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[20] It should be recalled that "habits" are not simply the ways we have become accustomed to act but the inherent manner of behaving. Thus we speak of the habit of a plant, its characteristic growth. Leibniz was writing in French. Littré cites the following from Bonnet: Nous ignorons quelle sorte de respiration s'opère dans la chenille; nous savons seulement qu'elle ne saurait respirer à la manière des grands animaux, puisque les parties qui font chez elle l'office de poumons, sont répandues dans toute l'*habitude* du corps.

We trust that by now the extraordinary fertility of Leibniz's imagination has been indicated. And yet we have barely touched upon his whole philosophical output. He was undoubtedly one of the most astute critics as well as constructive geniuses of his amazing century. Unfortunately much of his work was known only to a small circle, and that which was known by the general reading public seemed bizarre and incomprehensible to them. It was also unfortunate that, as Montaigne had his Charron, so Leibniz had his Wolff. Wolff's self-appointed task was to systematize the many ideas of his master. It was through his dogmatic philosophy that Kant absorbed his principal tenets.

4. Wolff

Though Christian Wolff (1679–1754) survives simply as the founder of the dogmatic philosophy usually thought of as a systematic presentation of Leibniz' various theories, he is of some interest in himself. His philosophy pretty well dominated German thought during a good part of the eighteenth century in much the same way as Cousin's did in nineteenth-century France. One reason for this must have been its simple and clear presentation. Wolff's point of view was that of what he called rationalism, and by that term he meant a technique like the geometrical method by which, from axioms and definitions and the usual processes of deduction, he could prove conclusions that would be irrefutable. Moreover, he was one of the earliest modern philosophers to build up consciously a system of philosophy. On the model of the medieval scholastics, he divided all knowledge into the traditional fields of ontology, cosmology, logic, psychology, ethics, and the like, and believed in the possibility of establishing the theorems of each in a hierarchical logical order. The order was based on the extent or generality of the subjects: ontology covering everything that exists; cosmology, the order of the universe; rational psychology, deductions about the human soul; and so on. But he also made a sharp distinction between the rational and empirical sciences, defining the former as sciences about the possible, the latter as sciences of the observed existents. So that there would be no ineradicable discrepancy between the possible and the actual, definitions arose out of empirical sciences. Rational science might, however, orient the observer's attention to new problems and thus was of value not only in itself but also as a guide to empirical research. A similar distinction has been made in our own times between axiomatic and applied geometry. In the latter field one strives to find observable or operational equivalents for statements made in the former field.

Wolff's great weakness was in thinking that the philosophic premises from which he started his deductions were self-evident, whereas they were simply either traditional or the conclusions of his master. This weakness led him to maintain that the reason under its own power, that is, by its own procedural rules, could develop theories which would be both consistent and true to fact. The relation between logic and ontology is still discussed, and there is no generally accepted opinion about it even today. But that logic somehow or other reveals the general order of the universe is by no means self-evident. The best explanation that Wolff could give was Leibniz' pre-established harmony, which was just another way of saying that the relation existed. The result of this technique appears in another rationalist, Baumgarten, whose most famous contribution to philosophy is the invention of the special field of aesthetics.[21] When one studies the ideas which gave rise to this field of inquiry, one sees in it nothing more than the a priori need for a science of what we sense or feel, to fill out the trinity of which the other two members were logic, the science of the reason; and ethics, the science of the will. Since there were three main faculties of the soul, there must be three disciplines corresponding to them. It would not have required prolonged meditation to realize that there was more to a poem than what one could see, hear, taste, smell, and touch; and that even a picture, especially an eighteenth-century picture, was more than visual. Yet the rationalistic method forced one to accept separate faculties, to assign limits to each, and to castigate the traversing of frontiers. In aesthetics this led to the curious idea that beauty was, above all, sensuous and that each sense had an art appealing to it. When beauty was found that was not sensuous, it either had to be "reduced" to something sensuous or to be explained in such a way that its roots were in sensation. Since, in the second place, each art had its sense, arts had to be visual, auditory, or the like, though usually the so-called lower senses were rarely discussed in this connection; and the limitations of vision were used as critical standards in paintings, of audition in music. In a similar fashion Destutt de Tracy, little knowing the relation between what he was saying and Wolff, maintained that the United States Constitution was constructed on the analogy of the human mind: the senses in the legislature, the reason in the judiciary, the will in the executive. No faculty must transgress upon the territory of another—hence the separation of powers. It would probably be admitted today that all of our faculties intertwine and interact and that we think with our whole mind. But the rationalistic technique would not have admitted this. For rationalism required sharply separated classifications and subdivisions, each of which must have a pervasive essence from which certain deductions could be made *more geometrico.* Thus in the preface to his *Rational Psychology,* Wolff says that "no philosopher to date has tried to deduce from the essence of the soul the reason why these rather than those faculties should be inherent in it and why the soul follows these rather than those laws in its modifications."[22] The notion that one could deduce such things from the essence of something was peculiar to this school of thinkers.

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[21] There is now accessible in English Baumgarten's *Reflections on Poetry,* trans. by Karl Aschenbrenner and William B. Holther (Berkeley, Calif.: University of California Press, 1954). It is an excellent sample of the rationalistic technique.

At the same time Wolff was aware of the fact that one cannot deduce existence from essences, and limited rational science to the discovery of the possible. By the possible he meant that which logically followed from his premises. Leibniz himself maintained, as we have seen, that all possibles were sooner or later actualized if their actualization was not inconsistent—or inharmonious—with the rest of existence. Wolff's restrictions on assertions about existence that are deduced from rational science are made on the basis of experience. In psychology he states definitely that nothing can be asserted of the soul in rational psychology which is not shown to exist in the soul through empirical psychology (*op. cit., Proleg.,* sec. 6). Hence it would seem as if the distinction between rational and empirical sciences were not so sharp as might be imagined. That the soul exists he had shown to his own satisfaction in his empirical psychology. Its essence is not discovered by an act of intuition but by a rational purgation of what experience has found. But the reason can explain why one thing is done rather than another.[23] It is in his answer to the question "Why?" that Wolff most clearly shows his Leibnizian strain. A sufficient reason in Leibniz might be either consistency with propositions already proved, an efficient cause, or a final cause. The same is true of Wolff. As an example of the first, we may cite the following passage from his *Rational Psychology.* He had proved (*ibid.,* sec. 11) that "If the soul in total perception distinguishes partial perceptions, it is conscious of the things perceived and contrariwise"; he had also (*ibid.*, sec. 12) proved that "the soul is conscious of itself in so far as it is conscious of its own changes, as of actions; it is not otherwise conscious of itself." He then argues (*ibid.*, sec. 13), "When the soul is conscious of itself and of the things perceived by itself, it is having distinct perceptions, and contrariwise. For when the soul is conscious of things perceived together, it has distinguished partial perceptions within the totality (by *ibid.*, sec. 11). And it knows the same when it is self-conscious (by *ibid.*, sec. 12). Wherefore, when the soul is conscious of itself and of the things perceived by itself, the total perception is distinct (by *Empirical Psychology*, sec. 44), and therefore the soul is having distinct perceptions. *Quod erat unum.*" From this he can deduce that the total perceptions are distinct and consequently the partial perceptions are clear. But then we can distinguish the things perceived from one another, and consequently the soul is conscious of things perceived together and likewise can be conscious of itself. *Quod erat alterum.*

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[22] I translate from the edition of the *Psychologia rationalis* of 1734.

[23] Per rationem intelligitur, cur aliquid potius fit, quam non fit. *Op. cit., Ontology,* sec. 56.

So much will probably suffice as an example of answering the question "Why?" through deduction. He reverts to efficient and final causation in the explanatory notes to his deductions.

This might be thought of as a confession of failure. But Wolff maintained steadily that all subject matters should be treated from the rationalistic and the empirical points of view. Experience, though an inferior sort of knowledge, gave one the world of contingency, and reason gave one the world of certainty. Since contingency was an undeniable feature of the universe, there must be some source of knowledge about it. But again, as in Leibniz, contingency did not imply chance events. It simply meant that certain ideas or beliefs or statements were true only if others were true, and that we could not usually acquire knowledge about all the others that would be needed to demonstrate the truth of the contingent. This probably arose from the obscurity of our ideas of the empirical world, for Wolff, like his master, maintained that no idea arising from sensation could be so clear as one that was deduced from self-evident principles. Yet every empirical idea "involved" all the past and future of the world,[24] for each individual is, on Leibnizian principles, a little picture of the whole.

In a recent edition of *Leibniz's Principles of Nature and of Grace* and of the *Monadology*,[25] it has been shown how Leibniz constantly repeats in summary form his total philosophical system. Certain themes, such as that of cosmic unity, the windowless monads, the principle of the identity of indiscernibles, recur constantly as if each philosophic treatise were itself a more or less clear picture of the whole system. In Wolff much the same is true. It makes little difference which of his books one reads; all are repeated in each, insofar as the inevitable chronological order of their appearance permitted. This may seem like simple proof of a man's consistency or self-confidence, but it is more than that. For Wolff, as we have said, is one of the first philosophers to elaborate what might be called a true system of philosophy. It is indubitable that Descartes had as his ideal the elaboration of a few simple principles—he says one—which would illuminate the whole world as a ray of light illuminates a picture.[26] But though certain themes run throughout the Cartesian corpus, there is no apparatus of cross references from treatise to treatise, and one would be hard put to it to set one up for the *Treatise on the Passions* and the *Meditations*. Similarly in Hobbes, though he prided himself on his deductive powers, the theory of natural rights does not and is not made to follow from the theory of ideas. But in Wolff there are not only pervasive principles of form but of content, and he is conscious of the need of making a set of ideas cover all fields of knowledge. There can be no discrepancy between reason and experience unless one has committed fallacies in his reasoning or failed to observe facts clearly. And, since all reason can be reduced to a few self-evident propositions—indeed at times it looks as if he meant to the Law of Contradiction—there is no obstacle to deducing all possible facts from these simple premises. On this assumption—for it could be nothing more —he was able to deduce the most extraordinary conclusions, and anyone who has read what he has to say about natural teleology will agree that he is the forerunner of the later *Naturphilosophen*. This assumption, that all propositions could be deduced from one or two, was the root out of which the tree of systematic philosophizing grew. Indeed the history of philosophy itself came to be written as a treatise on systems of philosophy. Though the divorce between philosophy and science is usually thought of as a contribution of Kant, one can see that, if it had not been finally pronounced by Wolff, at least the interlocutory decree had been granted by him. The gap between reason and observation was widened and, as far as his own country was concerned, philosophers began to pay more and more attention to reason and less and less to observation. We shall see the full effect of this in the Post-Kantians who dominated nineteenth-century philosophy as Wolff dominated eighteenth-century in Germany. Meanwhile we must turn back to France, where experience corrected by reason, but not superseded by it, became the ruling tendency.

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[24] *Rational Psychology*, ch. ii, sec. 185.

[25] André Robinet, *Principes de la Nature et de la Grace, etc.* (Paris, 1954).

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[26] His residence in Holland apparently made him think that the technique of the Dutch painters of his time was standard practice.

CHAPTER 9

Les Philosophes

THE critical spirit, which is so integral a part of modern philosophy, owes its vitality to a group of philosophers who do not usually occupy much space in a general history. This group, whom I am calling by the common name of *Les Philosophes,* disagreed upon many points of doctrine. Some were atheists, some theists; some rationalists, some anti-intellectuals; some ended in scepticism, some in conviction. Yet they were united at least by a common purpose, which was the improvement of civilization through education. In reply to Montaigne's great question "Que sçais-je?" they made an attempt to list the things known and, above all, unknown. Regardless of their special theories of knowledge, they were all agreed that truth was good in itself and that it could be found by examining beliefs rationally. Even when, like Rousseau, they had little respect for science, they used the rational technique to justify their contempt for it.

Just as the early thinkers of the Renaissance, men like Telesio, Bacon, Montaigne and Descartes, were all eager to find a new method of inquiry which would supersede the supposed method of Aristotle, these men were as eager to draw up compendiums of information which would be reliable and which might serve as a foundation for human education. These compendiums were to contain the facts, and to show what supposed facts—part of traditional beliefs—were unwarranted. To do this, tradition had to be examined with the same impartiality as contemporary beliefs. The principle of authority as a test for truth had to be rejected and its place taken by the laws of evidence. The laws of evidence, as distinguished from the laws of logic, were practical rules for ascertaining what ideas could be accepted as they were pronounced by their adherents and what must be rejected. Thus in general we find these men maintaining that a witness who contradicts himself is unreliable. A book, usually thought of as authoritative, must be held in suspicion if it states one opinion in one place and another in another when both are about the same subject. Such a book may be right in one of its opinions or wrong in both; but it cannot be right in both. Since the book which was most frequently used as a source of ideas on both history and philosophy was the Bible, the Bible was submitted to the same type of scrutiny as any other writing. It had been pointed out as early as Philo Judaeus that the Bible contained inconsistencies; but those who maintained it to be a work of revelation, given to us by God "who is neither deceived nor capable of deception," also maintained that the inconsistencies could all be eliminated if one would interpret it allegorically.

In the second place, a witness is unreliable if he has something to gain by his testimony and, contrariwise, his reliability is less suspect if he has something to lose by his testimony. A man, for instance, who is named as heir to an estate in a will and who testifies that the deceased was insane at the time he made the will, is normally considered to have less prejudice than if he were to testify that the deceased had never been so clear-minded as when he wrote his testament. When a scientist advances evidence against his own theories, we tend to have greater respect for his word than when he neglects such evidence. Protestants who defend the burning of Servetus and Catholics who defend that of Bruno are not the best historians of either event, though as a matter of fact they may have been able to lay aside their personal interests in these cases and discuss them with complete objectivity. Finally, a witness is considered more reliable when he has first-hand knowledge of what he is talking about than when he is talking from hearsay. In scholarly matters one is supposed to use as far as possible primary sources. If one is writing about the opinions of Bacon or Locke, it is usually considered proper to go to their books for one's information rather than to books about them. Hence in religious matters it was believed by *Les Philosophes* that the Bible itself was better evidence about its teachings than commentaries on the Bible, though it must be admitted that the knowledge of Hebrew and Greek which is required to read it is not a common accomplishment. To examine original sources, to look for prejudice in authorities, to dig out inconsistencies was the proposed technique of these men. I am not saying that they were always successful in applying it.

Enlightenment, what the French of those days called *les lumières,* was what was needed if the human lot was ever to be improved.

Give men the facts and they will use them properly. Teach them to reason correctly and they will avoid error and ignorance. Since truth is homogeneous, discord will be eliminated once all men possess the truth. Men disagree because of ignorance, false information, false inferences. Such seems to have been the general program of these reformers.

Beneath all this there appears to be an assumption that men really want knowledge and prefer the naked truth to the embellishments of superstition. But where a Milton writes "How charming is divine Philosophy," Keats writes, "Do not all charms fly at the mere touch of cold Philosophy?" The charm resides apparently in the applied ornaments, the metaphors and similes, the rhetoric, the emotional overtones which Plato satirized in the *Phaedrus*. A survey of human tastes will show that some men prefer the charms to that which is beneath them; others prefer the substratum to the charms; and a third find the simple and clear statement of the truth charming enough. There is to be sure a fourth group, and not the least influential, who maintain that the beliefs of their fathers suffice and that examination of what common sense or tradition propounds is sacrilege. They want the comfortable assurance that what has always been believed is unquestioned. Nothing, of course, has always been believed, but it is true that there is a body of opinion, usually uncriticized, which is upheld by the great mass of mankind, which gives stability to society, and which is believed automatically, or, as it is more commonly expressed, instinctively. By the eighteenth century this mass of popular doctrine had been shaken by the Protestant Reformation, the spread of free inquiry in the northern countries, the actual discoveries and inventions which had been made in increasing numbers during the previous three centuries.

It requires no great analytical skill to see that a second presupposition was guiding these men: the presupposition that the frontiers of knowledge had not been reached and that no body of writings contained all possible truth. The demand for freedom of research was foolish if all was known and nothing new was to be discovered. There were several attitudes toward this question. On the one hand, there were men just as honest as their opponents who believed that all knowledge was already discovered, at least implicitly, and that a philosopher had only to explicate the ideas resident in the traditional beliefs. On the other hand, there were men, like those whom we are to examine in this chapter, who maintained and sought to prove that really new ideas, ideas which did not follow logically from traditional beliefs, could be proved and had been proved. But again some of the former could maintain that knowledge had to be appraised; that some knowledge was important and some unimportant, as Socrates has been reported to believe that astronomical subjects were of less interest than moral. But the latter group would reply that the implications of, let us say, astronomy gave man a new sense of his place in the universe and hence could not be separated from such a subject as ethics. All truth was frequently held to be of equal interest since one could not foretell the implications which any given idea or theory might have for human life. And, finally, if man is a rational animal, then he becomes less of a man when his reason is not allowed full play.

A program such as this demands first a compilation of what is really known, and the period which we are discussing—the last few years of the seventeenth century and the first half of the eighteenth —was famous for several such compilations. Of these the two most important are Bayle's *Dictionnaire* and the *Encyclopédie* of Diderot and d'Alembert.

1. MORÉRI AND BAYLE

An encyclopedia is etymologically the whole circle of subjects necessary for education.[1] Pliny's *Natural History,* the works of Isidore of Seville and Cassiodorus, the *Specula* of Vincent de Beauvais are commonly cited as forerunners of our modern encyclopedias. But in 1674 appeared a *Grand Dictionnaire Historique,* by Louis Moréri which is the grandfather of modern works of this sort. Moréri organized his articles in alphabetical order, which he thought was an innovation, covered a very wide range of subjects, and thus provided his readers with easily found information on matters which he at least believed to be important. He has been criticized for his bias and did indeed spend a good bit of space refuting the ideas of some of the men he was writing about. He was more vulnerable to the charge of lack of judgment, for his credulity in using ancient sources was very great, though no greater than that of some of our contemporaries who pillage Diogenes Laertius for facts about the biographies of the ancient philosophers.

It was Moréri who gave Bayle the idea of writing his famous *Dictionnaire historique et critique.* Pierre Bayle (1647–1706), born a Protestant, converted to Catholicism for a short time as a schoolboy, and relapsing into Protestantism in which he died, was a man of enormous erudition who, without the benefit of modern libraries with their subject indexes or bibliographies, managed to read pretty nearly everything in French and Latin which was pertinent to his subjects. Like Spinoza, of whom he thoroughly disapproved, he found relative safety in the Netherlands and consistently refused positions which would tie him to a school or faction. His Protestantism, though fervent, never reached the fanaticism of his coreligionist Jurieu, and he found himself able to maintain as objective an attitude to his own sect as to others. He had had the advantage of Jesuit schooling, so that when he wrote of Catholic doctrine it was from first-hand knowledge. And like all scholars of his day, he was well trained in the classics. His lack of knowledge of German and English was of little importance since most learned works were written in French or Latin.[2] It was, however, not merely the facts which Bayle presented which were of significance, but his method of criticism. His article on David will serve as a fair sample, and since it was one of those which laid him open to harsh criticism from Protestants as well as Catholics, it may be well to say a few words about it.

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[1] There is an excellent historical account of such publications in *The Encyclopaedia Britannica* (11th ed.) under the title "Encyclopaedia."

After giving the usual account of the story of King David with copious references to the Bible, Bayle says, "He was a radiant center of holiness in the Church; he sheds a light of fertile consolation and piety on it which it would be impossible to sufficiently admire; but he had his faults and even in his last words will be found the obliquities of politics. Holy Scripture reports them merely as history; that is why each of us is permitted to judge them. Let us end by saying that the story of King David could reassure crowned heads against the fears which stern casuists might arouse in them by maintaining that it is almost impossible for a king to be saved." Thanks to the activities of the Censors, Bayle changed this to read, "He was a radiant center of holiness in the Church; he sheds a light of fertile consolation and piety on it; but he had his faults." The rest of the passage which I have translated is omitted. But it was probably not so much the body of the article as the commentaries which caused the greatest trouble. As a note to the question of Saul, "Abner, whose son is this youth?" (I Sam. 17:55), Bayle writes:

> It is somewhat strange that Saul should not have known David on that day, seeing that the young man had played instruments several times in his presence, to calm the dark vapors which tormented him. If a story such as this appeared in Thucydides or Livy, every critic would conclude unanimously that the copyists had transposed some pages, published something in one place, repeated something in another, or inserted passages which were inauthentic in the au-

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[2] For a sympathetic account of Bayle see Howard Robinson, *Bayle the Sceptic* (New York: Columbia University Press, 1931).

> thor's work. But one must be careful of such suspicions as far as the Bible is concerned. There have been nevertheless people bold enough to maintain that all the chapters or all the verses of the Book of Samuel no longer have their original place. The Abbé de Choisi had solved the difficulty, it seems to me, in a better way. "David," he says, "was brought to Saul: first he did not recognize him, though he had seen him several times when he used to come to play the harp for him; but as several years had passed, as David at that time was very young, as he had come to the Court in the role of a musician, and as he then saw him clothed as a shepherd, there is no wonder that a King, burdened with business, whose mind was sick, should have forgotten the face of a young man in which there was nothing extraordinary." I should only have liked him not to say: (1) there had been several years that Saul had not seen David; (2) that David was very young when he came to the Court as a musician. There is no evidence that he was much less young when he killed Goliath, than when he came to Saul's Court for the first time; for at the time of his first trip, he "was a mighty valiant man, and a man of war, and prudent in matters, and a comely person"; he was only thirty years old, when after the death of Saul, he was elected King; and many years must have passed between the death of Goliath and that of Saul.

Though Bayle prefaced all this with the caution that one should not treat sacred history as one does profane, nevertheless he himself is obviously using exactly the same technique on both. The conclusion which the reader of his note was forced to draw was evident.

Nor does Bayle hesitate to expatiate on the faults of the great prophet and sage. Relating David's request of the King of Gath (I Sam. 27:5) for a city in which he might live and the grant of Ziklag, Bayle adds the following comment:

> David took himself there with his soldiers and did not let their swords rust. He led them frequently on raids and killed men and women without pity; he merely let the cattle live; they were the only booty with which he returned; he was afraid that prisoners would reveal the whole mystery to King Achish; that is why he took no prisoners but slew all of both sexes. The mystery which he did not want revealed is that these ravages took place not on the lands of the Israelites, as he maintained to the King of Gath, but on the lands of the former people of Palestine. Frankly this conduct was pretty bad: to cover a fault a greater fault is committed. A king to whom obligations are owed is deceived; prodigious cruelty is committed in order to conceal this deceit. If David had been asked, "By what authority do you do these things?" what could he have replied? A private personage as he was, a fugitive who had found asylum in the land of a neighboring prince, has he the right to wage war on his own account and without any commission emanat-

> ing from the ruling sovereign of the country? Did David have such a commission? Did he not on the contrary abandon both the intentions and the interests of the King of Gath? It is certain that if today a private person of any birth whatsoever, should act as David did on this occasion, he could hardly avoid being called names bearing very little honor. I realize that the most illustrious heroes and the most famous prophets of the Old Testament sometimes approved of putting all life to the sword; and therefore I should hesitate to call what David did inhumane if he had been authorized to do so by the orders of a prophet, or if God by inspiration had commanded him to act in this way: but it is manifest by the very silence of Scripture on this point that he did it all by his own decision.

There is no need to quote his long disquisition of David's behavior toward Uriah and the treachery which he plotted with Abner, but it is important to quote his justification for his comments on the King's behavior.

> Those who may find it strange that I should speak my feelings on these acts of David, compared with natural ethics, are asked to consider three things. I. That they must themselves confess that the conduct of this prince toward Uriah is one of the greatest crimes which can be committed. Between them and me there is but a difference of degree; for I recognize with them that the faults of this Prophet did not prevent his being filled with piety and with a great zeal for the glory of the Eternal. He was subject to waves of passion and of grace. This is a fate attached to our nature since the sin of Adam. God's grace led him frequently, but on various occasions his passions got the upper hand: politics imposed silence on Religion. II. That it is quite permissible for a private person like me to judge of facts contained in the Scriptures when they are not expressly qualified as coming from the Holy Spirit. If Scripture when reporting an act blames it or praises it, no one is permitted to appeal from this judgment; each must base his approbation or blame on the model of Scripture. I have not been false to this duty: the facts on which I have tendered my small opinion are reported in Holy Scripture with no comments by the Holy Spirit, no trait of approbation. III. One would do great harm to the eternal Laws and consequently to true Religion, if one gave ground to the profane to object that, as soon as a man shared in God's inspiration, we should look upon his conduct as a rule of morals; so that we should not dare condemn the acts of people most opposed to the notions of equity, when it is he who has committed them. There is no middle point whatsoever; either these acts are worthless or acts similar to them are not evil; but since one must choose one or the other of these alternatives, is it not better to save the interests of morality than the glory of an individual? Otherwise, would one

> not bear witness to his preference for accusing the honor of God than that of a mortal?

What this amounts to is more than a denunciation of certain acts of David. It is a profession of principle: that one is free to interpret the Bible as one would any other book and that, in the second place, we know what is moral and immoral without the study of instances. Bayle has been accused of hypocrisy in maintaining that he would follow the Bible when the Bible definitely and overtly states a moral principle. But I see nothing either hypocritical or evasive in his attitude. A careful reading of the text will indeed show that David is not praised for the acts which Bayle finds reprehensible. Whether it was prudent for a man to state his opinion about so eminent a personage is another question and a question which was solved for Bayle by the persecution to which he was submitted. As a matter of fact, both versions of the article were printed in the edition of 1720, so that the reader could take his choice and also compare the two. But it must also be pointed out that in his book on comets,[3] that morals had nothing to do with belief in God and that a society of atheists could be quite as moral as a society of theists. Atheism to him was no worse than idolatry and Bayle had plenty of evidence drawn from the Ancients to show that men who were pagans were as noble as Christians and frequently nobler. This was a fearful blow to his associates, both Catholic and Protestant, and opened the way to rational ethics based on natural law, *la bonté naturelle,* the law of progress, and other similar notions. It was a theme to be developed later by Voltaire and was in the same line of reasoning as that of the theistic hedonists, who, though believing in God, nevertheless defined good and evil in terms of pleasure and pain.

In metaphysical matters Bayle was a follower of Montaigne and La Mothe le Vayer. He believed, as many of his contemporaries did, including as we have seen so pious a man as Huet, that there are certain questions which the human reason is simply incapable of solving. On such matters he advocated the suspension of judgment. What made him suspect, when others were not, was his dwelling on the arguments in favor of scepticism, as well as his frequent obscenities. Most commentators on Bayle seem agreed that his taste for the obscene was greater than normal, though his master Montaigne was certainly as interested in such things as he was. He himself disliked Rabelais whom he considered to be a mere imitator of Lucian,[4] and he defended himself vigorously against the charge of pornography. It is true that part of his defense consisted in pointing out that he had to do something to attract frivolous readers, a defense which will leave many of our contemporaries cold. On the other hand, he wished to present men of the past as they actually were and to rob them of the fake haloes which had been painted round their heads. By dwelling upon their vices, he was attempting to show that they were neither better nor worse than the common run of mortals; and in an age when it was still possible, indeed usual, to represent the lords of the earth as made of finer clay than their subjects, he performed a valuable service. If a man of his day wished to wallow in the muck of real pornography, he had no need to read Bayle's folios. The writings of the Libertines were numerous and readily available.

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[3] Lettre à M.L.A.D.C., docteur de Sorbonne: où il est prouvé par plusieurs raisons tirées de la philosophie et de la théologie que les comètes ne sont point le présage d'aucun malheur . . ., 1682.

Bayle's contribution to philosophy, then, was not that of a great system builder, nor did he have much that was original to say on the sort of problems which have been presented so far in this book. But it cannot be denied that he was a great educational force in developing a historical sense, a historical technique of criticism, and in gathering together in one place a mass of information which up to his time had been scattered about on library shelves.

2. MONTESQUIEU

About half a century intervened between the publication of the first edition of Bayle's *Dictionnaire* and the appearance of the first volume of Diderot's *Encyclopédie.* Meanwhile new interests were capturing the attention of French philosophers. The seventeenth-century thinkers, Descartes, Malebranche, Pascal, and their fellows, developed philosophies dominated by religious problems. One finds Descartes overtly accepting the authority of the Church and attempting to prove the existence of God as He was described in Scholastic texts. The duality of mind and body, which was a cardinal principle of Catholicism, was also one of his fundamental tenets, as we have seen. In Malebranche the characteristic doctrines are those of the primacy of faith over reason, man's vision in God, and God's constant presence in causation. In Pascal metaphysics is located on a plane distinctly lower than that of religion, and his depreciation of reason in favor of "the heart" is a commonplace. One has only to run over the list of those philosophers whose thoughts we have attempted to expound to see that their problems arose out of the field of religious ideas.

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[4] *Dictionnaire,* art. "Periers."

The growth of interest in secular matters is attested not only by the progress of natural science but also by the foundation of the various academies. The Académie Française dates from 1635, the Académie des Beaux-Arts from 1648, the Académie des Inscriptions et Belles Lettres from 1663, and the Académie des Sciences from 1666. This was in principle a recognition of the separateness of religious and secular studies, for though many of the members of the various academies were, to be sure, ecclesiastics, nevertheless their investigations were only occasionally supervised by the Church. The Church still had a monopoly on education, a monopoly which it was not to lose until the Revolution. But at the same time groups of scholars were meeting and reporting their findings to one another in relative freedom from religious censorship. The adjective "relative" must be emphasized here, for in comparison with the Royal Society, which existed in fact, if not in theory, from the middle of the century, its freedom was far from complete. It will be noticed that there was nothing corresponding to an Academy of Social Studies.

Four men will be mentioned here as precursors of the Encyclopedists: Montesquieu (1689–1755), Voltaire (1694–1778), d'Holbach (1723–89), and La Mettrie (1709–51). We select these on the basis of their influence on subsequent thinkers as well as on that of their actual contributions to philosophy.

In 1721 Montesquieu published his *Lettres Persanes,* surely one of the most delightful satires of French society ever written by a Frenchman. Through the devices of imagining two Persian travelers writing home about France, Montesquieu was able to take a more detached view of things than would have been possible had he written in his own person. The device was simply the reverse of that of the various Utopias which had been written. Instead of contrasting one's society with that of an imaginary ideal society, one introduced into it exotic visitors and recorded their supposed impressions. The importance of the vogue for this sort of writing, a vogue which lasted into our own times, was the suggestion that Occidental institutions and manners were not an expression of universal human nature at all but were provincial customs peculiar to one part of the globe. Once this way of looking at human affairs became habitual, the way was open for cultural relativism and ultimately for the apparently revolutionary idea that even moral standards are peculiar to the societies in which they arise. It should not be forgotten that Europeans had been accustomed to think of occidental history as universal history. St. Augustine's *City of God* is at most a history of Mediterranean man, but its author thought of it as a history of mankind. Its seventeenth-century replica, Bossuet's *Discourse on Universal History,* first published in 1681, extends the tale into northern Europe.[5] One would never know from this way of writing history that anything had happened east of Suez. And yet, if the French ever needed information about the ways in which other people lived, it was at a time when their empire was spreading over the globe. One might have thought that at least the Dauphin, for whose enlightenment Bossuet wrote his history and into whose hands it was expected to entrust the future of the empire, might have been given some consciousness of the kinds of problems which his proconsuls would have to face. But such knowledge was to come not from the official tutors of princes but either from secular scholars or Jesuit missionaries.

Montesquieu's most famous work is the *Spirit of the Laws* (1748). The title of this work is not without importance, for it is in itself a concise statement of a philosophy of human nature. It runs, "The Spirit of the Laws, or the relation which laws must have with the constitution of each government, customs, climate, religion, commerce, etc." Though the anti-Platonic slant of this may be obvious, it should not be forgotten. Montesquieu is discussing laws, not the law. He is exploring their variations, not their homogeneity. He is attempting to show how they vary; that is, with what. If they vary with climate, commerce, customs, and so on, then the implication would seem to follow that our own laws are no different from any other and that the value of a constitution can only be measured in terms of the total situation in which it arose. That is perhaps why certain critics, like Dupin, feared that the book would have a bad effect on the loyalty of the French. For if one is educated to believe that one's king rules by divine right and that the Divinity always commands the same things everywhere, then one should not fall into the trap of believing that the theory of divine right is peculiar to Frenchmen or, at most, Europeans. In spite of his implicit relativism, Montesquieu believed that there were certain laws governing human behavior which were universal. These he called, as Hobbes and most philosophers did, the laws of nature.[6] The laws of nature are those universal principles descriptive of human nature in general. To discover them one must attempt to imagine mankind living outside of society or, as was the custom at the time, before the formation of societies.

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[5] My copy of this work, dated 1707, has a frontispiece with Father Time showing the historian three scenes on an easel: The Creation, the Flood, and the Crucifixion.

[6] See *Esprit des Lois,* Bk. I, ch. ii. I use the edition of Edouard Laboulaye (1876).

The laws of nature, for Montesquieu, can be found through an examination of man's essential being, that which distinguishes him from all other creatures. The first of these laws is man's sentiment of weakness, of his inferiority to all that surrounds him, his desire for tranquillity. Here Montesquieu is clear that his main opponent is Hobbes. The desire for domination arises only after man lives in the company of others; by which is meant that one has to have someone to dominate before one can have the desire for domination. The word "before" must not be taken in a chronological sense. Montesquieu knows perfectly well that he is not writing the history of the human race; he is simply trying to deduce human desires and acts. The priority suggested is logical. This is to be justified by pointing out the varieties of social organization. If all societies were alike, then it might be possible to derive from their structure some idea of what the human race essentially was. But since they all differ to some degree and since the differences can be explained, universal human nature must be logically prior to human nature as found in society. A second law of nature would be the desire for food. A third would arise from the desire for sexual union, a fourth is that for living together in social union. As soon as men live in society, their natural equality disappears and the state of war begins (*op. cit.,* Bk. I, ch. iii). It is because of this condition of inequality that special laws for maintaining peace and decency are required. Such laws must, by the very nature of the environments in which societies are to be found, differ from one another. Reason, which is their origin, demands this. For if there is a difference in climate, in the quality of the soil, in the economic life of a people—that is, the way they earn their livings, in their religion, in the sizes of their population, and the like—then reason must deduce special laws to fit these circumstances. One cannot expect an Eskimo to live like a Hottentot, nor a Frenchman to live like a Chinese. They are all human, to be sure, but the expression of their humanity cannot be found in a cultural vacuum. All men wish to eat; but they do not all find the same foods, do not all have the same soil to raise them in, do not all have the same climate to permit them to eat or raise what others eat and raise. The same argument can be applied to the other three natural laws, and in all cases it will be seen that civil and political laws are bound to differ if they are to be rational.

In accordance with this reasoning Montesquieu begins by differentiating the kinds of government, a distinction which superficially appears to be that of the Aristotelian tradition, but, as has been seen by other commentators, in reality was not. The republican, the monarchical, and the despotic constitutions are, to be sure, distinguished partly on the basis of the number of individuals who are sovereign, though Montesquieu does not include aristocracy or oligarchy among the types of government; but one also sees that the distinction between monarchy and despotism, in his opinion, is the fixity of the laws in the former and their capriciousness in the latter. In a republic, he says (*op. cit.,* Bk. II, ch. i), the people or a part of the people is sovereign; when the whole people rule, one has a democracy; when part, an aristocracy. Aristocracy thus for him is a species of the genus republic. The people "are admirable in their choices of those to whom they will entrust some part of their authority. They have but to decide by means of those things which they cannot help knowing and which are part of their everyday experience (*qui tombent sous les sens*), but they are too slow when speed is needed and too fast when deliberation counts" (*ibid.,* ch. ii). The people are too likely to act according to their emotions. Hence Athens and Rome were right in electing a group, which Montesquieu calls a senate, to act as a brake on their passions. One sees at this point how he makes use of his laws of nature. It will be recalled that the first law is man's feeling of his own weakness, not a sense of reason. We are primordially governed, then, by a feeling; and, when we are entrusted with the rule of society, we shall revert to our primordial nature. Feelings will not provide food for all nor peace for all, nor will they maintain a just and tranquil community. Feelings demand the correction of reason, and that correction cannot spontaneously arise from popular emotion.

One might imagine that a monarch, governing according to fixed laws which he could not change, would serve as this corrective. Such a monarch was exemplified by the King of England, who had a parliament in whose hands was the great obstacle to despotism: a set of fixed laws. Neither the nobility nor the King's Privy Council will perform this function, for the former pays little if any attention to the civil government and the latter are too susceptible to change. Montesquieu might have added, since he was thinking of his own country, that both groups have no basic interests in safeguarding the rights of the governed. But these rights are not natural rights in the customary sense of the word. For those rights which are implied in the laws of nature are irrelevant to organized society. They are presocial, as we have seen. Society does not exist to preserve them nor can it be criticized for not preserving them. Thus freedom, which we are likely to think of as a natural right, is restricted by Montesquieu to doing whatever the law permits (*op. cit.,* Bk. XI, ch. iii), and is by no means doing whatever one wishes. Every state has the same object in view—self-perpetuation (*ibid.,* ch. v);

and it is not to be expected that a state should grant to its subjects the right to destroy itself. But each state also has objects: aggrandizement was that of Rome; war, that of Sparta; religion, that of Judea; commerce, that of Marseilles; public tranquillity, that of China; navigation, that of Rhodes; natural liberty, that of the savages. One nation, England, has for its special object political liberty. But, whether Montesquieu is camouflaging his real purpose or not, his ostensible purpose is to show that even this object is peculiar to one kind of state.

Following John Locke, he proceeds to analyze the government of England in his famous chapter on the division of powers into legislative, executive, and judiciary (*ibid.,* ch. vi). Based on his theory that societies are formed, in part, because of fear, he tries to show that no Englishman need ever fear his fellow citizen, since each set of powers is balanced and checked by the other two. If the executive is also the legislative, he can pass laws which suit his own purposes and then carry them out. If the judicial power is joined with the legislative, the judge would not only decide how the law applies but make it; and, if it were joined to the executive, the judge would become a tyrant. "All would be lost if the same man, or the same body of agents, either of nobles or of the people, exercised the three powers" (*ibid.,* ch. vi). In the Italian republics, freedom is less than in the monarchies, for the simple reason that the three powers are united in one body. One need not read this chapter with a microscope to see that Montesquieu has no great admiration for human nature in the raw. On the other hand, though he laid the foundations for the modern theory of an organismic state, he did not believe that the state was an end in itself. He does not lose sight of his basic fact that citizens or subjects are individual people and that their governments are organized not merely to protect them and whatever rights they may be supposed to have, but also in accordance with certain natural conditions over which they have no control whatsoever. It is curious that this last point is one which is seldom emphasized in discussions of this philosopher. One should have inferred from the whole structure of his book that it was not the nature of Man which determined his form of government, but external causes which varied from society to society. If there was one extension of this principle which might have been expected from his followers, it was an ethical (and possibly aesthetic) relativism. But one does not find such an inference even in d'Alembert's eulogy of him which prefaces the fifth volume of the *Encyclopédie.*

Montesquieu's discussion of freedom is almost entirely limited to freedom from unjust prosecution. He was well aware of the growth of this type of liberty in England, and it is the English example which undoubtedly inspired his chapters on the subject. What he calls "philosophic liberty" is of little interest to him, and indeed he seems none too sure of whether it exists. "Philosophic liberty," he says (*op. cit.,* Bk. XII, ch. ii), "consists in the exercise of one's will, or at least . . . in the opinion one has that one is exercising it." He thus does not commit himself to the reality of the will's freedom nor does he seem to think that it matters for his purposes. "Political liberty," he continues, "consists in security or at least in the opinion one has of his security." The citizen's freedom then depends, above all, on the goodness of the criminal laws. When the relatives of an accuser could be witnesses against the accused, when a man could be accused without being heard, when false witness could be accepted, when only one witness was required, then the citizen was not free. Furthermore penalties must be fixed by law so that caprice may be avoided. His hope is that in this way there will be uniform laws throughout the state and that the uniformity itself will be a guarantee of justice. In the second place, he insists on the necessity of preventing crimes as well as punishing them (*ibid.,* ch. vi), for some crimes are committed because decency is too difficult, if not impossible. Finally, one should be punished only for one's "external acts," not for one's thoughts (*ibid.,* ch. xi). In a state in which heresy, *lèse-majesté,* books, and speeches could be severely punished, such comments must have seemed pretty revolutionary. To us who have seen the revival of these practices, they may seem so too. But from the philosophic point of view, not from the political, their burden is that of the natural equality of all men who have formed societies not because they are good in themselves, but because they serve useful purposes. Their utility must be directed toward those whom they serve, not toward those who administer them. It is no longer Zeus who has given the scepter to the ruler, but the governed.

It is Montesquieu's chapters on the influence of climate which have caused most stir among his readers; for here he emphasized something that was relatively novel. For centuries men had believed that physical things so remote as the planets might determine the course of individual lives, while others had maintained that all men were doomed to perdition because of Adam's fall, though a few might be saved by God's incomprehensible grace. The notion, then, that people had little personal control over their lives was not, in itself, new. What seems to have shocked people was that an external force of which they had not previously thought was the determinant. Montesquieu's idea of what a climate was is much too superficial to bear scientific scrutiny. That there are cold and warm climates obviously cannot be doubted; but, as Volney was to point out in his *Leçons d'Histoire* and elsewhere, no country has but one climate; and in countries of similar climates, the soil, the moisture, the winds, all may differ. That our author thought that men living in cold climates were vigorous and men living in warm were more passionate, more lecherous, less vigorous, is no longer of much interest. But what is of the greatest interest is his basing psychological traits not on the constitution of men as men, but on the environment in which they live. For, since the customs of a country are to be derived from the character of its inhabitants, and that ultimately from the climate, no way is left for judging all customs without regard for their causes. Moreover, the system provides a rule for so reforming customs that they will be harmonious with the environment. For instance, in discussing landownership in India, he says that since the land is entirely in the hands of the princes, the people have no way of avoiding the natural effects of the climate which in itself inclines them to laziness. Were the land in the hands of the peasants, they would have to work it, and thus the evil effect of the climate could be corrected (*op. cit.,* Bk. XIV, ch vi). If Montesquieu had said that climate was the only factor determining character, he could not have argued also that its effects could be corrected by law. But he was, of course, far from maintaining such a monistic position. The impression that he is really talking about Europe, where the remnants of feudalism and the monasteries kept large acreages out of the hands of the peasants, is irresistible, especially when one reads his brief chapter on monasticism (*ibid.,* ch. vii). It is perhaps unnecessary to insist that he expected his book to be read by Frenchmen.

The pluralism of Montesquieu appears overtly in Book XIX, chapter iv. There, raising the question of what produces a general spirit or mind of a people, he answers: "the climate, the religion, the laws, constitutional precedents [*les maximes du gouvernement*], customs, manners." "In proportion as in each nation one of these causes acts with greater force, the others give way to it to that extent. Nature and the climate almost alone dominate the savages; manners govern the Chinese; laws tyrannize over Japan; customs used to set the tone in Lacedemonia; precedents and antique customs set it in Rome" (*ibid.*). So convinced is he of the "naturalness" of a nation's character, that he urges his readers not to interfere with that character even though it appear distasteful to them. People should be let to develop in peace. There is, to be sure, a wide gap between virtue and vice; but moral vices are not always political vices nor are all political vices moral as well. This approximation to what was to be the doctrine of *laisser faire* is fundamental in Montesquieu. His purpose is merely to indicate where man-made laws have contravened those of nature, meaning by "nature" here those forces which come from acts of God. Might he not have thought that the climate could be changed, the soil made more fertile, new land dredged up from the sea, deserts watered, populations kept stable, manual labor reduced. In any event, to him the separation between Man and Nature was almost absolute—almost, since he knew that men had in actuality interfered with Nature. But that there was, or could be, a constant interaction between the two does not seem to have made much impression upon him. He was writing, to be sure, before the development of steam power and electricity and cannot be properly criticized for not having anticipated their discovery. But he was also living at a time when, at least in his own country, civilization had become top-heavy. It was to take only a generation before the balance would be shifted and the superstructure overturned. His main argument, in the final analysis, turns out to be that laws have attempted to do too much, inasmuch as they had reached the point where they were in conflict with the very things with which they should be in harmony. These things could be grouped together under the general label *Nature.* Though this word has been abused and has become so ambiguous that it has ceased to have any utility in discourse, Montesquieu was assuming—and tried to justify his assumption—that a people is what it is because of factors that existed prior to the laws. One may influence these factors to a certain degree, but the moment always comes when failure will make itself manifest by signs that the primitive nature of men is violated. Their primitive nature is presocial and expresses itself in their passions, their weakness, their need for sustenance and mates. It is on this basis that his French disciples built their more extreme platforms.

3. La Mettrie

If Montesquieu's philosophy made plausible that there were no eternal standards of law, no nonhistorical bases of government, good or bad, except insofar as the laws of nature were involved, La Mettrie (1709–51) increased the number of variables which could be functions of human ideals. The former had, as we have seen, related the forms of government to a set of factors which might vary independently of one another, so that there was little sense in comparing the government of an oriental country like China with that of an occidental country like France. If he was willing to use the constitution of England as a standard by means of which he might evaluate that of France, it was because both nations had about the same climate, the same religious traditions, and the same economic pursuits. But, to the extent that other determining factors differed, to that extent it was absurd to judge one constitution by the other. As far as individuals were concerned similar things might be said. The occidental religious tradition had upheld a psychophysical dualism according to which the soul might inhabit a body and might indeed become enslaved by that body. But there was always the possibility that a man escape his corporeal entanglements and liberate himself from the demands of the flesh. The possibility, though seldom realized, was in fact the goal of all good men. The Pauline battle between the flesh and the spirit was accepted as a fact, and for it to be a fact required a strict duality between the two hostile elements. If it turned out that the body was but a figment of the soul's ideas or that the soul was an effect of certain bodily changes, then the whole religious tradition collapsed.

La Mettrie's *l'Homme-Machine,* first printed in 1748, attempted to show, by the same arguments which proved that animals were merely machines without souls—an argument which is usually attributed to Descartes—that one could prove that men were also machines.[7] The proof consists in pointing out that all psychic events are caused by physiological events. To maintain that something is caused by something else does not of course prove that it does not exist. One might as well argue that since no language exists that is not spoken by human beings, languages do not exist. This should not be taken to entail the idea that it is of no importance to discover general causes of things that are not known to have them. But it goes without saying that one should not assert more than one has demonstrated. What La Mettrie was probably driving at was the inefficacy of the soul, rather than its nonexistence. But in 1748 that was enough to classify him with the materialists and to horrify those readers who demanded a soul capable of doing things in its own right.

La Mettrie, who was a pupil of the Dutch physician Boerhaave,

[7] The doctrine that animals were soulless was propounded before Descartes by Gomez-Pereira in his *Antoniana Margarita* (1554). But, as Bossuet pointed out in his *Connaissance de Dieu et de Soi-Même,* ch. v, sec. 2, it was more likely that Descartes got the idea from St. Thomas Aquinas than from Pereira. See my *The Happy Beast* (Baltimore: Johns Hopkins Press, 1933), p. 82.

prided himself not only on the results of his investigations but also on his method.[8] Experience and observation alone were to be his guides, and only the experiments and observations of a physician were worthy of citation. Physicians will tell one that each man differs from his fellows through his temperament, which in turn is determined by the peculiar combination of his four humors: the black bile, yellow bile, phlegm, and blood. The imagination can be aroused by purely physical causes, such as fatigue or lack of sleep; drugs, such as opium or even coffee, can induce psychic states which could not arise without them; without food the soul "pines away, goes mad, and dies exhausted" (*ibid.,* 11); the kind of food determines whether a man will be savage or gentle; old age weakens the reason; even one's physical appearance indicates the quality of one's mind. "Look at the portraits of Locke, of Steele, of Boerhaave, of Maupertuis, and the rest, and you will not be surprised to find strong faces and eagles' eyes. Look over the multitude of others, and you can always distinguish the man of talent from the man of genius, and often even an honest man from a scoundrel" (*ibid.,* 14). Temperature may turn a gentle and indulgent man into a passionate one. Climate determines the character of the people who live in it. And the possession of a brain determines whether an animal be intelligent or act only through instinct.

In the nineteenth century such philosophers as Schopenhauer were to use similar arguments in reverse to prove that the soul was autonomous. One had only to indicate the utility of these various material substances—drugs, foods, and organic instruments—to maintain that man's will sought them out in order to achieve certain ends. Does opium produce dreams or does a man take opium in order to escape reality? Does the brain determine thinking or does the animal that wishes to think develop a brain? We know that muscles can be developed by exercise, which in turn is undertaken because of an individual's desire to perform certain acts, not simply acrobatics; but also playing on musical instruments requires the most delicate adjustments of eye and muscle. One could as well insist that people have overcome almost all physical handicaps, substituting one sense for another, using artificial limbs, using toes in place of fingers, increasing the perceptual acuity of their sense organs through practice; and the desire to overcome these handicaps cannot, it might be argued, arise from the physiological equipment of the person. A person born without arms may use his feet and legs for those purposes which arms and hands usually attain. But the training comes from other human beings and the willingness to undergo the training must come from the individual's own will, not from the lack of the proper instruments in itself. But this reaction to the kind of materialism preached by La Mettrie, which was to be developed in much greater detail by Cabanis at the end of the century, did not appear, as we have said, until the nineteenth century.

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[8] For La Mettrie's biography and character, see the very rare pamphlet by Pierre Lemée, *Offray de la Mettrie* (Saint-Servan, 1925). More accessible is Dr. Gertrude Bussey's excellent *Man a Machine* (1927), a translation of the work with useful appendices and notes. Quotations in the text are from this edition.

The argument thus expounded was bolstered by arguments from comparative anatomy. La Mettrie seems to have believed that if he could show the similarities between the human and the animal organisms, he would have strengthened his position, for in general no one was anxious to prove the psychophysical duality of the beasts. La Mettrie was a great believer in the gradual transition from animal to human form, running through the apes. Man's intelligence has come about through speech, and before the invention of speech man was as much like a beast as an ape is. But speech is simply sounds or shapes, both arbitrary, and hence our intelligence itself depends on material causes. The origin of language was a problem that was to annoy almost all of the philosophers of the time. Roughly speaking, it may be said that those who inclined toward some form of materialism maintained that it had been invented; but others, of whom Rousseau was to be the leader, argued that inventions require intelligence and that, since man must have been intelligent before he could have invented language, language could not be the source of his intelligence. La Mettrie did not foresee this rejoinder and since words, whether spoken or printed, were physical beings and since these physical beings were of such a nature that they could produce physical effects on the brain through the visual and auditory nerves, and since these physical effects could be identified with the elements of the imagination, it could be maintained that all the processes of reason could be reduced to a sequence of images. These images are clearly of different sorts, depending upon the sensory apparatus through which they arise, and therefore the simplicity of the soul is destroyed at one blow. Yet the simplicity of the soul was an essential belief of Christianity. It was fairly generally believed that animals had images and that their apparent rationality was an effect of their recalling past images and acting in accordance with them. If the human soul also was simply a collection of images, then it, too, would be no more than the very complicated animal mind was said to be. La Mettrie accordingly devotes a long paragraph to the role that the human imagination plays in what we normally think of as rationality. "Imagination," he says (*ibid.*, 27), "is the soul, since it plays all the roles of the soul." "By the imagination, by its flattering brush, the cold skeleton of reason takes on living and ruddy flesh; by the imagination the sciences flourish, the arts are adorned, the wood speaks, the echoes sigh, the rocks weep, marble breathes, and all inanimate objects gain life" (*ibid.*). No psychic agent is needed to guide it; it operates under its own power. Its power, however, may vary from man to man, but its variations, again, depend on the physical organism which can be educated to perform intellectual marvels. These marvels will be found not only in the field of the arts but also in that of the sciences.

We are then admittedly animals, akin to all the others, more gifted in some ways, less in others. If this is so, then it becomes incumbent on La Mettrie to give some explanation of the moral laws which appear to distinguish us from the beasts. Here he revives some of the classical stories about animal gratitude and human bestiality and concludes that the natural law rules the beasts as it does us. The natural law is "a feeling that teaches us what we should not do, because we would not wish it to be done to us" (*ibid.*, 41). As one of the most sacred commands of Christianity, the so-called Golden Rule was turned by La Mettrie into a universal psychological principle based upon fear. The beasts can fear as well as man and, if fear of reprisals is the one universal stimulus to doing right and avoiding wrong, then clearly, as he says himself, it does not require education, revelation, nor legislation to make it effective. What then of the Supreme Being, one of Whose functions had always been to reveal the right which frequently was in contradiction to our natural, as opposed to our supernatural, inclinations? La Mettrie has no hesitation in saying that he believes His existence to be probable, but he also has no hesitation in saying that it is irrelevant to morality. Reverting to Bayle, he asserts that an atheistic society could be as moral as a Christian society. Atheists have certainly lived noble lives and Christians have led ignoble ones. The existence of God is probable but irrelevant to the conduct of life. The soul then loses its position as a substance contained within, or living alongside, the body. At most the name should be reserved for the part of us that thinks. Animate bodies need but the possibility of motion, that is, self-originated motion, to manifest all the physical and mental traits which we discover in ourselves.

There are several inferences which could be drawn from this philosophy that would prove of great influence in subsequent years. (1) If the human being could be explained entirely through physical law, so perhaps could the universe. This deduction was made by d'Holbach. (2) If individuals were differentiated from one another by their original physical equipment, which could be corrected only by education, then either the attempt to produce a uniform human nature must be abandoned, or a new system of education must be introduced. The latter was the goal of the *Encyclopedia.* (3) If man were essentially a higher animal, then it was necessary to find out as much about the animal side of our nature as possible. This was to be the task of Cabanis.

4. D'Holbach

If La Mettrie demonstrated the superfluity of a soul in explaining human conduct, the Baron d'Holbach (1723–89) turned his attention to God, and attempted to show that the world was a machine without a machinist. La Mettrie was willing to admit God's existence as a plausible belief; d'Holbach could see no plausibility in it. Though his books were printed pseudonymously—or in some cases anonymously—this was the only concession he made to the censor. He may be justly criticized for his reasoning, but certainly no one could justly criticize him for hypocrisy. He was an atheist; he admitted it; he defended his atheism. His metaphysics is materialistic; his ethics hedonistic; his epistemology sensationalistic. Few people in his time were willing to follow him to the conclusion of his arguments; many nevertheless profited from some of them and shared some of them. His attacks on Christianity were as outspoken as his attacks on metaphysical spiritualism. To him it was a collection of superstitions fostered by a priesthood intent on keeping power in its own hands and reducing the human race to intellectual slavery. Its beneficial results, when they existed, could be had by purely rationalistic science; the rest had best be done away with. Like La Mettrie, he does not occupy much space in the traditional histories of philosophy. Yet his reasoning was clear and concise, and most of the attacks upon him were not based on fallacies that he had committed but on the horror which his conclusions stimulated. Much the same could have been said of *ce misérable Spinoza,* whose *Ethics* seems seldom to have been studied carefully in his time. But he, too, preached doctrines which were repulsive to the dominant classes in intellectual Europe, and since they were repulsive, they must also be false.

D'Holbach's main work is to be found in his *Système de la Nature,* first published in 1770. This work was preceded by his anonymous *Le Christianisme Dévoilé* (1767), in which he attempted to show the evils that organized Christianity had brought to the world. Since his attack on religion was similar to others which were to be made later in the nineteenth century, and since it is of interest in itself, we shall introduce our discussion of d'Holbach with it. His main argument against Christianity, other than the falsity of its beliefs, is its bad effect on the political life of a nation. When one remembers the intimate relations between Church and State in eighteenth-century France, the target of his arrows becomes unmistakable. Christianity to him is the Gallican Church. Its purpose is to render the King's subjects loyal through fear. It preaches the virtues of submission to power, of renunciation, and of austerity, and it practices none of them. Its technique is based on seizing the minds of men while they are children: "Amongst almost all modern peoples education seems to have as its sole purpose the making of fanatics, bigots, monks, that is to say, men harmful or useless to society; no one gives a thought to forming citizens; princes themselves are generally victims of the superstitious bringing up which they are given, remain throughout their lives in the deepest ignorance of their duties and the true interests of their states; they imagine that they have done all that is needed for their subjects if they have their minds filled with religious ideas which take the place of good laws, and which spare their masters the painful trouble of good government."[9] That the Church in France had privileges that were unique needs no proof here. That its privileges were often used badly is also well demonstrated. In fact, it was so closely intertwined with the State that any attack against it, any reform, would have entailed an attack against the State. The Pauline injunction to accept the government that God has given us must have prevented many devout Catholics from indulging in political reformation. And many of the outright abuses of power, such as the treatment of Protestants, which can be shown to have been disastrous even from the economic point of view, could be laid to the door of the clergy. The French saw their neighbors in England and Germany enjoying the fruits of philosophy and science; they saw their own people deprived of such benefits as might come from enlightenment or pushed into hypocrisy. D'Holbach's weakness lay in his attribution of the evils of the Gallican Church to Christianity itself. But the definition of Christianity was no easier then than it is now. Was it to be found in the four Gospels or in the Synoptic Gospels alone? Was it to be found exclusively in the words of Christ? Was one to include the Acts of the Apostles and the Epistles? Was Holy Scripture enough to establish Christian doctrine or must it be supplemented by the decisions of the Councils? And must these decisions be also supplemented by tradition? And if one or a group of these questions were to be answered in the affirmative, who was to be the interpreter of the texts involved? It is doubtful whether any reader of d'Holbach brought up in a Protestant country would accept his version of the tenets of Christianity. But d'Holbach was writing not only for Catholics but for French Catholics.

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[9] *Christianisme Dévoilé* (edition of 1767), p. 30.

"The Christian religion," he says (*ibid.*, p. 31), "which prides itself on giving an unshakable support to morality and on giving men the strongest motives for urging them to lead a life of virtue, has been on the contrary a source of divisions, of fury, and of crime. Under the pretext of bringing men peace, it has brought them only madness, hatred, discord, and war. It has provided a thousand ingenious means of torturing them. It has spread amongst them plagues unknown to their fathers, and the Christian, had he been in his right mind, would have regretted over and over again the peaceful ignorance of his idolatrous ancestors." Not even the kings, whose powers were supposed to be bolstered by this religion, have succeeded in their purpose. For they have developed alongside of their own power a second sovereignty, that of the organized Church. And whenever the question has arisen of to which of the two, State or Church, was the subject's loyalty due, it was the second sovereign which won out. That the Church also had been the means of correcting the abuses of princes is not mentioned by d'Holbach. He can find nothing in its history but its failures. It must, of course, be admitted that Christianity, however defined, did not succeed in bringing peace on earth or good will to men, or even peace to men of good will. It did not succeed as an organization in eliminating idolatry and superstition. D'Holbach was not unique in pointing out that even those individuals who had been officially charged with ministering to the needs of Christians failed often to lead Christian lives. He was not unique in indicating the irreconcilable conflicts in Christian teaching between, as he says himself (*ibid.*, 54), the God of vengeance, the God of mercy, the God of armies, the God of peace. But he might have been expected to see that the collection of beliefs and practices that were given the sacred name had been perpetuated and increased not out of the wickedness of a small group of ecclesiastics but by the great mass of suffering Europeans. He might also have asked himself whether he was not demanding of the Church something which it was not prepared to give. Pascal would probably have been willing to grant the truth of most of his criticisms. And at the same time he would have expressed his faith in those mysteries whose truth he was sure of. To this d'Holbach was ready to reply that "a revelation which would be true, which would come from a just and good God, and which would be necessary for all men, ought to be clear enough to be understood by all mankind. Is the revelation on which Judaism and Christianity are founded of such a kind? Euclid's *Elements* are intelligible to all who want to understand them; this work arouses no disputes among geometers. Is the Bible as clear, and do revealed truths give rise to no disputes among the theologians who proclaim them? By what fatality have the Scriptures, revealed by Divinity itself, still need of commentary and why do they need enlightenment from on high to be believed and understood?" (*ibid.*, 62.)

D'Holbach clearly belonged to that group of philosophers who maintain that everything in the universe is intelligible. By "intelligible" he seems to have meant "rational," and by "rational" to have meant "susceptible of scientific corroboration." But it could not be denied by a Christian that the very essence of his religion was the reality of mysteries, miracles, in short, unintelligibles. It should have been obvious, but unfortunately was not—and presumably still is not—that if all beliefs must be capable of statement in factual form, then mysteries have no claim on our faith. But if the mysteries cannot be framed in rational sentences, then it would be the better part of wisdom not to attempt to so frame them. A mystic could smile at d'Holbach's naiveté in assuming as a first principle something that would make his beliefs impossible and then in asking him to abandon them. A rational theologian was not in such a position. The mystic could keep a stubborn silence when asked to state his beliefs or at most—if he felt impelled to speak—could pour out the traditional paradoxes of his school. But a rational theologian was not in so fortunate a situation. And the overwhelming majority of Christians had been given to developing their religious and theological ideas in what they thought was rational discourse.

When d'Holbach comes to the question of ethics, he may be said to be on firmer ground. For whether his readers could define satisfactorily what they meant by such terms as "justice," "temperance," "equity," "clemency," they had to admit that even before the appearance of Christianity on earth there had been just, temperate, equitable, clement men. This had indeed been admitted by some of the early Fathers. But if this were so, then Christianity was not needed to propagate such virtues. Yet here, too, it could have been replied that though there were virtuous pagans, paganism in itself was not a body of beliefs fortified by an ecclesiastical institution which maintained that the very constitution of the universe was to be identified with the will of a just and benevolent God. Stoicism had been an approach to that goal, and again some of the early Fathers had maintained that philosophies of this sort were a preparation for Christianity. If the Church had taught that before the coming of Christ there had been no just and otherwise virtuous men on earth, it would have had to repudiate even the prophets and wise men of the Old Testament. But it had never turned its back on history to that extent. Yet if one were to believe, as d'Holbach did, that the theological doctrines of Christianity were absurd, nothing was left of its teachings except ethics; and he could with reason insist, as Bayle had done before him, that pagans and other non-Christians were as virtuous as Christians. Therefore he could conclude that the teachings of the Church were not even needed for the purposes of ethics. D'Holbach goes further than this. He attempts to demonstrate the absurdity even of the ethics of Christianity. Love thy neighbor as thyself is nonsensical because "every man by his very nature, loves himself in preference to all others; he loves his neighbors only because they contribute to his own happiness; he is virtuous insofar as he does good to his neighbor; he is generous when he sacrifices his own self-love to him; but he never loves him except for the useful qualities which he finds in him; he can love him only when he knows him, and his love for him is bound to be based upon the benefits [*les avantages*] which he receives from him" (*ibid.,* 133). But the Christian could easily reply to this that so far, so good; it is precisely to correct this point of view that the Church spreads its teachings. Without the illumination of religion one cannot love one's neighbor as oneself; but once that illumination has been received, then a diviner ethics has been instituted in the human heart. I say that a Christian could easily have made this reply; but unfortunately there were too few Christians of this stripe in eighteenth-century France to do so with sincerity.

There is no need to outline the entire attack which d'Holbach made upon the Church as both a moral and political teacher. The question now arises of what he would have put in its place. And the answer was Nature.

The command to follow Nature was as old as the fifth century B.C., if not older, and by d'Holbach's time the sacred word had become almost as saturated with ambiguities as it is today.[10] One thing can be said with certainty: to d'Holbach the word named something opposed to the supernatural. He was talking about Nature as the subject matter of science, describable in terms of rational law, always obedient to such law. And his avowed purpose in expounding what he called his "System of Nature" was to free men from religious superstition which was, he believed, the origin of our inveterate hatred of others, our barbarous persecutions, our continual massacres which have so often appeared on the theatre of this globe.[11] He hoped to "inspire man with courage and respect for reason; to teach him to know his essence and his legitimate rights; to consult experience and not imagination led astray by authority; to renounce the prejudices of childhood; to base his morality on nature, on his needs, on the real advantages which society procures for him; to dare to love himself; to work for his happiness while producing that of others; in a word, to be reasonable and virtuous in order to be happy here below; and to give up his daydreams which are either dangerous or useless."

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[10] Anyone still captivated by the charms of Nature should, by all means, study A. O. Lovejoy's analysis of the meanings of the term and related terms in *Primitivism and Related Ideas in Antiquity* (Baltimore: Johns Hopkins Press, 1935).

The first step forward to this goal consists in abandoning the distinction between the physical and the mental. Man is a purely physical being (*ibid.,* I, 2) and the mental is simply "this physical being considered from a certain point of view, that is, relative to some of his ways of behaving, due to his peculiar organization" (*ibid.*). D'Holbach in this sentence can be seen as one of the ancestors of what in our own time has been called behaviorism. There is no spiritual substance; what is called by the name of mind or soul is nothing more than special ways of bodily action. But these ways of acting are themselves determined by natural law just as everything else in the universe is. Natural law (*ibid.,* 5) is simple, uniform, invariable; it is known by experience; and experience is always derived from our senses. If we could only remember this fundamental fact, then we would never fall into the errors that have caused so much harm in human history. But when we ask, as we inevitably do, what natural law causes men to fall into these errors, to follow prejudice and authority rather than experience, d'Holbach has no answer. The duality, which he asserts does not exist, reappears in another form. The purely material world, that is, the world admitted by all to be purely material, does not commit these errors. Falling bodies, gravitating planets, chemical elements and compounds always seem to follow the laws that Nature has assigned to them. But man, though essentially also a natural object and subject to exactly the same laws, is seen at once to act in an unnatural fashion. D'Holbach may attribute this to laziness or fear (*ibid.,* 8), but either it is as the result of natural law that we become lazy or afraid, in which case these emotional states are an integral part of our nature, or they point to elements in our being which are antinatural. Lest this seem to be a pedantic and sophistic complaint, let it be pointed out that no theory of human nature has been devised to date in which something analogous to the Fall of Man has not been invented. The chronological primitivist, for instance, who believes in something like the Golden Age, a time when men were living in a state of happiness, however his happiness may be described, is forced to admit that man's primordial nature has either been annihilated or has been seriously weakened. He is then obliged to account for the degeneration in question. The man who argues to the original goodness of man has to admit that he is no longer uniformly good and then has to account for his lapse from goodness. The spokesman for moral progress has to admit that in man's first stage on earth he was wicked or ignorant or cruel or dirty, or otherwise distasteful, and then has to explain why and how he ever rose from that condition. Oddly enough, the solution to the dilemma was easily found though few if any found it: it was the admission that human nature was not homogeneous but heterogeneous and that no uniform set of laws would describe it. But obviously if one begins one's work by assuming that natural law is fixed and uniform, then everything describable in its terms must be equally fixed and uniform. Though it is not our conscious purpose to quarrel with the men whose ideas we are expounding, this one is of such importance, even today, that we yield to the temptation of criticizing it.

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[11] *Système de la Nature,* Volume I, 1770 preface, unpaginated.

Returning now to d'Holbach, we find that he not only believed that all knowledge was sensory in origin and thus inseparable from corporeal behavior, but that natural law was synonymous with the laws of matter in motion. Thus Nature became a system of material particles operating in accordance with the laws of motion, and anything that might seem to be in conflict with this view must be erroneous. Sensation, thought, and all action must be interpreted as forms of motion and not merely as static effects of moving particles. Interpreted strictly this would imply that a sensation, such as a color or sound, an idea, as well as muscular displacements, must have all the characteristics of matter, be in space, and in fact even be ponderable. Neither d'Holbach nor any other materialist of his time ever did interpret materialism so strictly; on the contrary, all were satisfied if they could give reason to believe such events to be the effects of moving material particles. When d'Holbach defines what he means by "cause" and "effect," he does not evade the consequence of his view of Nature (*ibid.,* 13), but when he speaks of the effects in what is normally called the mind, he overlooks the consequences of his materialism. Thus, in discussing those motions which common sense would call sensations or volitions, he maintains that they are hidden from view and must be inferred to exist from their perceptual effects. But they could be inferred in this manner only if one had already assumed the very conclusion which he is attempting to demonstrate. One may rightly infer, to use his own example, that when we see a man running away from something, he is agitated by the passion of fear; but we could not infer that the passion of fear was itself a motion of material particles simply by seeing a man running away. It might be either material or spiritual or whatever third thing might be possible.

One might guess from what has been said that d'Holbach would accept the homogeneity of all things since they are material. But, on the contrary, he cites *le profond et subtil Leibnitz* to show that every particle of matter is an individual with its own peculiarities (*ibid.,* 28, note 8). Each particle differs from every other in all ways: in activities, motions, velocity, depending on the amount of material substance that is in them. There is nothing in this which would contradict anything that he has said about the homogeneity of matter itself, since experience shows that different portions of matter do differ in these measurable ways. The general qualities of all matter are extension, divisibility, impenetrability, configuration, mobility (*ibid.,* 33), but each of the qualities may obviously vary in degree, so that one can accept the homogeneity of matter while also accepting the principle of variety in its qualities. The list of these qualities clearly is that of Locke which, as we suggested, is the list of those properties which are sufficient and necessary for the construction of Galilean physics. By arguing to the possibility of various combinations of elements—which in 1770 were still the four classical elements—d'Holbach was able to explain the existence of the so-called three kingdoms; and, since matter itself is indestructible, he concludes that there is a cyclical process continually going on in the universe, running from composition to decomposition. If this were not so, there would be the possibility of one kingdom's taking over the whole cosmos; that is, for instance, of all matter turning into animate matter or vegetable matter. "Movement brings to birth, conserves for some time, and destroys successively the various parts of the universe one by the other, while the sum of existence remains always the same. Nature by her combinations gives birth to suns, which proceed to become the centers of so many systems; she produces planets which by their own essence gravitate and describe their orbits about these suns; little by little the motion of each dies down; it will one day perhaps scatter the parts of which it has composed these wonderful masses, which man in the short space of his existence glimpses but for a moment in passing" (*ibid.*, 39). But nevertheless each body has also the property of self-preservation. "Newton calls it the *force of inertia;* the moralists have called it in man *self-love;* which is nothing but the tendency to preserve oneself, the desire for happiness, the love of well-being and of pleasure, the promptitude of grasping everything which appears favorable to one's being, and the marked aversion for all that upsets or threatens it: primitive feelings common to all members of the human race which all their faculties strive to satisfy, and which all their passions, their volitions, their acts have as their continual object and end" (*ibid.*, 49). And, since all this is part and parcel of the natural order, everything in it must be determined by the laws of that order. Hence the universe, whether that part which is human or that which is non-human, is ruled by Necessity. When we maintain that something happens by chance, we do so simply because we are in ignorance of its cause. And, when we see the order in accordance with which events occur, that is, their causes, then we conclude that this order is intelligent, a fallacious conclusion, a projection of our own nature and not an observation. It is one of our weaknesses to project our nature into Nature itself, but we must resist it. The order that is in the cosmos is the causal order and there is no reason whatsoever, he argues, to maintain that it is in itself or is the result of cosmic intelligence. Intelligence discovers the order of Nature, but it is not that order. This is d'Holbach's reply to the cosmological argument for the existence of God.

It follows automatically from the principle of universal necessity and from what might be called the naturalness of man, that no man can initiate action, and that hence free will is an illusion. As soon as one examines one's thoughts, says d'Holbach (*ibid.*, 74), it becomes obvious that nothing arises spontaneously, but that, on the contrary, everything that takes place in one's mind is caused by external forces. Man observes that he is part of the universal network of material particles colliding with one another and that even those psychical effects that appear to be most personal and secret are really tied in with motions external to the human being (*ibid.*, 75). He is, in other words, what La Mettrie described him as being, a machine. But the question arises here of whether d'Holbach has not proved too much. For even if man is a machine, composed of the same kind of matter as all other machines, he is, as an individual machine, capable of contributing something to the events in which he participates. A stone falling off a roof and crushing the skull of a man walking on the pavement below is responsible for crushing that skull, even though it does fall in accordance with the law of falling bodies. Had the stone been lighter, the accident might not have been so grave. Had it fallen a moment sooner or later, the accident might not have happened at all. The stone, it is true, did not determine its own weight or the moment of its release from the roof. But its peculiar characteristics must be taken into account when the event is described. Neither d'Holbach nor any other materialist ever thought of explaining admittedly material events without taking into account the peculiar natures of their component parts. Why human beings should form the one exception to this technique of explanation would seem explicable only as the materialist's anxiety to reduce the human mind to impotency. Whether a volition is material or immaterial is irrelevant to the point at issue. If a man's determination to do something is the immediate cause of his doing it, the materiality of his determination or the simple fact that it, too, was caused by something antecedent to its occurrence has nothing whatsoever to do with the case. It would be an interesting fact, to be sure, should our minds turn out to be material and that hence our volitions should be also material. But a man's responsibility, in the sense that he himself contributes something to the events of which he is a part, cannot be settled on the basis of his materiality or spirituality.

We can, in spite of such criticisms, follow d'Holbach in saying that man has no reason to consider himself to be one of Nature's darlings, a privileged person. He may still be said to be "subject to the same vicissitudes as all her other productions . . . Let him raise himself in thought above the globe which he inhabits and he will see his species with the same eye as he sees all other beings: he will see that, just as each tree produces fruit according to its kind, so each man acts according to his special energy and produces fruit, acts, and works that are similarly necessary. He will feel that the illusion which prejudices him in favor of himself arises out of his being both spectator and part of the universe. He will recognize that the idea of excellence which he attaches to his being has no other foundation than his own self-interest and predilection" (*ibid.*, 89).[12] Self-interest therefore has to become the ground of his ethical system. Self-interest is what Nature teaches and, since we should follow Nature, we should seek self-interest. The child when born has no other values; education supplies them and renders them compulsive through the force of habit. It is consequently the task of education to make virtue serve self-interest and vice prevent its satisfaction.

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[12] D'Holbach devotes a special chapter of the *Système* to disproving the idea of free will (Part I, ch. xi). But I fail to find in it any awareness of the problem of man's unique impotence. He always appears to conclude that, if a person's choice is itself determined, he does nothing from choice.

Here it would appear that d'Holbach switches his ground. For at this point he argues that education should make virtue advantageous and that public opinion and the state should co-operate in this program. But, he asks (*ibid.,* 151): "Are the examples which we see daily likely to make us respect decency, probity, good faith, equity, moral innocence, conjugal fidelity, constancy in the performance of duty?" Is it not true that religion, which is the main support of morals, does not make us sociable, peaceful, and humane? Are those who serve their country rewarded more than those who pillage it and ruin it? These are, of course, purely rhetorical questions. But an opponent of d'Holbach's might well reply that if these things are so, then self-interest demands that we follow along with custom and that what he condemns is, in accordance with his own principles, virtue. The answer is that d'Holbach has in the back of his mind, as we all have, a set of virtues and vices which he does not question. These virtues and vices are traditional: patriotism, conjugal fidelity, etc., and their opposites. His problem ought not to be that of urging people to make the practice of the virtues rewarding, but to show that the virtues themselves do serve the interests of the individual.

Happiness, he maintains (*op. cit.,* Part I, ch. xv), is nothing more than uninterrupted pleasure. "But that an object should give us pleasure, demands that the impressions which it makes on us, the perceptions which it gives us, the ideas which it leaves with us, in a word the acts which it stimulates in us, be analogous to our constitution, our temperament, our individual nature, modified by habit and an infinity of circumstances or causes which give us more or less permanent or temporary ways of existing; it demands that the acts which the object excites in us or that of which the idea remains with us, far from weakening or destroying us, move steadily in the direction of increase; it demands that without tiring, exhausting or alienating our organs, this object give our mechanism the degree of activity of which it is constantly in need" (*ibid.,* 313). A healthy, well-adjusted organism is thus the first prerequisite for happiness. We return here obviously to the reconstruction of an ethics that has at least the appearance of being founded on his naturalistic principles. But when he moves beyond this point he strays once more from his path. Since he has already admitted that no two men are alike, he is also forced to admit that no two men have the same interests and that, because of this, education must step in to harmonize those that are in conflict. Education once more is called upon to demonstrate to its subjects that virtue is more useful than vice, but when he resorts to education he has abandoned his initial postulate. I am far from saying that, in fact, education is not needed to make a man moral; I am merely saying that if it is needed, then spontaneous self-interest—or pleasure—will not do the job. It is probable that d'Holbach thought that the practice of the virtues was actually more pleasant than the practice of the vices, much as the traditional hedonists frequently argue that some pleasures generate subsequent pains. As an empirical statement of fact, few would be willing to dispute it. But if one accepts it, then one also rejects the thesis that Nature is alone sufficient to establish a system of morality. And if by Nature we mean Nature corrected by art, then we are in a position identical with that of the antinaturalists.

Though d'Holbach wobbles between these two points of view, he shares the *Philosophes*' common enthusiasm for education. He admits only too vividly (*ibid.,* 327) that though Nature sometimes gives an individual a constitution such that morality is easy and pleasant for him, she also sometimes endows a man with a constitution which leads to disaster. "Nature has made us a baneful gift when she gives us blood which boils over, a too active imagination, impetuous desires for objects that our circumstances do not permit us to obtain, or, at any rate, which we can procure only with incredible effort, capable of endangering our well being and troubling the calm of society." Evil therefore is as rooted in the natural order as good and one emerges from the *Système de la Nature* with a more healthy respect for its author's honesty than for his logic. Whether the system permits it or not, he will not accept men as his beloved Nature creates them, but is as fierce in his condemnation of some as he is eloquent in his praise of others. The value of his work as a whole lies in its straightforward and uncompromising exposition of a naturalistic ethics, so straightforward and uncompromising that all its inherent weaknesses show up. If one omit the theological virtues, one will find him in agreement with most of what his opponents also say. And neither they nor he can justify their initial assumptions. To say that obedience to the commands of God is the basis of all goodness is no more logical than to say that the basis of all goodness is to obey the commands of Nature. These statements turn into postulates, and the Naturalists' polemic against traditional Christianity rests on their refusal to accept their opponents' assumptions. No assumptions can be proved; if they could, they would not be assumptions. That the practice of the theological virtues leads to unhappiness may or may not be true; but when the naturalist insists that they do, he is offering a definition of unhappiness which the Christian would not accept. When he points to the irrefutable evidences of vice among Christians, from Popes to catechumens, the Christian replies that such men are not real Christians. One cannot maintain, in fairness to d'Holbach, that he has not made a valiant effort to infer a set of values from a set of facts or that the application of his theory to life would make it vicious even in the traditional sense of that adjective. If one could make the effort to forget the theological virtues for a moment, one would see that he is striving to give good grounds for practicing the others. But what religious man would be capable of that effort or capable of even entertaining the possibility of making it?

5. Voltaire

One of the thinkers most difficult to fit into any historical pattern is Voltaire (1694–1778), for he can scarcely be said to belong to any philosophical group or school; he contributed no original ideas to the development of philosophy, and lived so long that his interests as well as his convictions changed steadily. The early Voltaire was a literary, rather than a philosophical, figure, and was a conventional dramatic and satirical poet. More or less of a sycophant, like the general run of *littérateurs* of that time, one never knows how much of what he said was sincere and how much ritualistic bootlicking. Yet, as he grew older and aligned himself with that group known as *philosophes,* it became clearer that he stood on the popular side of the barricades, on the side that was fighting for freedom of speech and conscience, for political reforms, and for anticlericalism. There are, in spite of the confusion and multiplicity of his views, certain ideas which later made him the idol of the revolutionary party, though he was scarcely to be considered a revolutionary himself.

One of these ideas was his pronounced antagonism to atheism. Much as he detested the organization of the Church and the domination which the clergy, especially the Jesuits, exercised over education and public opinion, he did believe in the existence of God, but it was not the God of Catholicism. It was the God of the Deists, the creator and governor of the natural and moral world. He did not believe that the idea of God was innate, for, as he pointed out,[13] following Locke, innate ideas ought to be discoverable in all peoples and there are some, like the Hottentots, who have no such idea. The belief in God's existence must be founded on reason, not on its universality or even its necessity. Reason then will show us that there is an order in the universe and a relation which each individual thing maintains to that order. All cosmological arguments, he says (*ibid.,* 7), reduce to this: "When I see a watch the hands of which mark the hours, I conclude that an intelligent being has arranged this machine so that the hands will mark the hours. Thus, when I see the springs of the human body, I conclude that an intelligent being has arranged these organs to be received and nourished for nine months in the womb; that the eyes would be made for seeing, the hands for grasping, etc." But this argument, he continues, does not prove that the intelligent being created the universe out of nothing and is infinite in every way. Hence the cosmological argument must be reinforced by a second argument, which turns out to be that of the necessity of a first cause (*ibid.,* 9). The need for a first cause rests on the impossibility of an infinite series of causes running back into the endless past. There must, then, be some being "which necessarily exists through itself from all eternity, and which is the origin of all other beings. From this it follows essentially that this being is infinite in duration, in extent (*immensité),* in power; for what could limit it?" (*ibid.*) If it is replied that matter is precisely such a being, then how could one explain the existence of change? Voltaire believed that change introduces absolute novelty into the world and that a self-enclosed and self-limited material world would be incapable of changing. If change occurs, there must be some cause of the change; and a cause, he assumes, is always external to that upon which it exerts its influence. He thus retains the explanatory technique of the physicists of his time, which runs back at least to Empedocles, and which may be phrased in popular language as the principle that nothing changes of its own accord. It should be observed that Malebranche and Hume, the latter following the former, had already criticized this idea of causation by pointing out that we can never observe more than the change and that hence causation itself as a process is something added to our experience. But in this, as in so many other philosophical problems, Voltaire was to take over the traditional point of view. A material universe which simply had orderly change as one of its essential characteristics seemed absurd to him.

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[13] See *Traité de Métaphysique* (1734), hereafter referred to as *TM.* I use the edition of H. Temple Patterson (Manchester, England: Manchester University Press, 1937).

Nevertheless Voltaire did not adventure far on the theological path. When it came to describing the nature of this universal governor, he abstained. He admits (*ibid.,* 14) that he does not know how God created the universe or how He operates. "His existence has been demonstrated to me; but as for His attributes and His essence, it has been demonstrated to me, I think, that I am not made to understand them." Similarly in regard to the purposes of existence: the cosmos is purposeful but I cannot pretend to knowing what the purposes are. Again, whether God be just or unjust, cruel or kindly, cannot be adjudicated, since those adjectives apply only to human beings and not to the Creator. "It is quite as absurd to say that God, in this sense, is just or unjust, as to say that God is blue or square" (*ibid.*, 16). Oddly enough, in view of Voltaire's having written in *Candide* the most acid satire of Leibniz' *Theodicy* penned to date, he follows this statement with words that might have been written by Pangloss, if Pangloss had had the gift. "It is therefore insane to reproach God because flies are eaten by spiders, and that men live only eighty years, that they abuse their freedom to destroy each other, that they suffer illnesses, cruel passions, etc. For we certainly have no idea that flies and men should live forever. To be firmly assured that a thing is evil, we must be able to perceive at the same time that we could have done better. We surely cannot judge that a machine is imperfect if we do not have an idea of the perfection that is missing. We cannot, for instance, judge that the three angles of a triangle are unequal, if we do not have the idea of an equilateral triangle. We cannot say that a watch is bad, if we have no distinct idea of a certain number of equal spaces which the hands of this watch must pass through in equal times. But who will have an idea in accordance with which this world detracts from the divine wisdom?"

The answer to this rhetorical question might be suspected to have been framed in Voltaire's own work, the *Poem on the Disaster of Lisbon,* with the subtitle, "Examination of This Axiom: Whatever Is, Is Right."[14] Instead of replying to the English poet that whatever is, simply is, and neither right nor wrong, since these terms apply only to human judgments, Voltaire in his preface to the poem flatly asserts that some things that are, are wrong. And one of the things that are wrong is disasters such as the Lisbon earthquake of 1755. He does not maintain that he can explain the origin of evil; on the contrary, it remains a mystery. "Revelation alone can untie this tight knot which all the philosophers have tangled; . . . the hope of a development of our being, in a new order of things, can alone console us for our present sorrows, . . . the goodness of Providence is the sole refuge to which man can have recourse in the shadows of his reason and in the calamities of his feeble and mortal nature."[15] How to explain, then, the horrors of so great a catastrophe is the problem. Is one to lay it to the effects of eternal laws pronounced by a God Who is free and good? Can so many thousands of innocent people be accused of expiating crimes? Would the cosmos have been any the worse if this earthquake had not taken place? But the most cruel of all the explanations seems to be that of the good which will result from the disaster. People say to the stricken: Have courage, other hands than yours will rebuild your homes; others will be born in your ruined houses; the North will be enriched by your losses; your sufferings are but a necessary part in the general harmony of the eternal laws.

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[14] In French the axiom is simply *Tout est bien.* But Voltaire, as he admits, is replying to Pope's *Essay on Man,* in which "he developed the systems of Leibniz, Lord Shaftesbury, and Lord Bolingbroke." For this reason I have translated the French into Pope's own words.

[15] *Op. cit.,* preface.

A des infortunés quel horrible langage!
Cruels, à mes douleurs n'ajoutez point l'outrage.

The usual victims of eternal law have no feelings and do not cry out to their heavenly Father for comfort. But man is in a different situation. He finds no help in the idea that his body will at least nourish the worms who have to eat something. From that point of view all life forms a chain of destruction; all prey on all.[16] Are we to construct a system of universal happiness out of mutual hostility? How are we to conceive of a God, goodness itself, a loving father, who pours out evil upon us with full hands?

Either man is born guilty and God is punishing us for our innate guilt, or this absolute master of all beings, without pity and indifferent to His creatures, has laid down laws of which the horrible consequences follow without interruption; or unformed matter, rebellious to its master, bears within itself its necessary evil consequences; or this disastrous and terrible life on earth is but a passage to an eternal world and death will put an end to our miseries. Whatever possibility we choose, we are in fundamental ignorance and nature gives us no solution to our doubts and fears. And though Voltaire had in his *Traité* maintained that no one could presume to judge the world without having an idea of a better one, he now believes that it is God's task to enlighten us.

On a besoin d'un Dieu qui parle au genre humain.
Il n'appartient qu'à lui d'expliquer son ouvrage,
De consoler le faible, et d'éclairer le sage.
L'homme au doute, à l'erreur, abandonné sans lui,
Cherche en vain des roseaux qui lui servent d'appui.

The solution to all this is Montaigne's question "Que sçais-je?" We do not know what we are, where we are, where we are going, nor whence we came. One cannot rebel against the laws of God—and

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[16] This gloomy thought so impressed people, even before the time of Voltaire, that one finds it depicted in tapestries.

Nature; one can only be resigned. But, one might add, our resignation does not prevent our writing poems eloquently giving the reasons for our resignation.

To leave a question unsettled, to maintain that one cannot settle it by rational means, is not to preserve a neutral attitude toward it. The Christian demanded an answer and, if one replied that no answer was possible, one was in the position of denying the affirmative as well as the negative. How sincere, for example, Voltaire was in maintaining in his *Traité* that one had no more reason to believe the soul to be immortal than to believe it mortal, I cannot presume to say. But all the arguments which he produces on this question are against immortality. He was obviously shifting the burden of proof to those who believed in it. On the other hand, when he is discussing the existence of God, he gives at length both the affirmative and negative, and gives them at some length, whereas when he brings up the question of immortality he acts as if everyone knew the arguments *pro* and devotes himself to the arguments *con*. His conclusion, moreover, stated in one sentence, seems evidence of mortality. "We must take care of those minds which believe that the mortality of the soul is contrary to the welfare of society, and remind them that the ancient Jews, whose laws they admire, believed that the soul was material and mortal, without mentioning the great sects of philosophers who were well worth the Jews and were very decent people [*honnêtes gens*]" (*T.M.*, 42).

Voltaire also had a definite opinion on the question of free will, a question which many religious people believed had to be settled in favor of freedom if arguments for morality were to be settled properly. He states the problem in the *Traité* (ch. vii, 43) as simply as it has ever been stated. "Freedom is solely the power to act. If a stone moved by its own choice, it would be free; animals and men have this power; therefore they are free." One can doubt the freedom of the beasts, since one can observe them only externally; but in the case of man, one can introspect and introspection will prove that one has this power. This cannot be an illusion similar to sensory illusions, for they can all be explained by definite laws. But if the feeling of freedom of choice which we all have is deceptive, then God would certainly have deceived us without purpose. If there is no God and we are nothing but material objects, then we could not have the feeling of freedom; if God exists, and He does, then our feeling of freedom must be veridical. Freedom is not complete; there are certain obvious limits to what we can do. But there is a real area within which we can make our own choices and we do not require the freedom of God to be free. Voltaire still retains the definition of freedom which d'Holbach had laid down; he still believes that a being is not free if his choices are determined by antecedent causes. Consequently he might have been expected to explain more precisely just how anything could act without some motivation which would turn him in one direction rather than another. He admits that our choices can be guided by the reason, that we act often in the pursuit of pleasure. But he also thinks, or says he thinks, that the pursuit of pleasure is identical with freedom. But if pleasure is the same to all men—which it probably is not—then man is not free to choose whatever he will, but is bound to choose the common pleasures of his species, whatever he may think. But if, for instance, what one chooses freely seems pleasurable—which it probably does—for the very reason that one has chosen it, then one man's meat may still be another's poison and the choices be free.

Voltaire, as is perhaps well known, was far from holding to his belief in freedom. The article *Destin* in the *Dictionnaire Philosophique* is a complete reversal of the position which its author took in the *Traité*. Natural laws, he argues there,[17] are immutable; there are no exceptions to them; and hence everything is necessary. Chance is an illusion. Therefore our decisions are as inevitable as material events. In the article *"Franc Arbitre"* we find the matter of choice presented to us as itself determined by the purpose which one has in mind. This purpose, or idea, dominates one's action, and once it is formed cannot be rejected. How such purposes or ideas arise within the mind, Voltaire does not pretend to know, but on the contrary asserts vigorously the impossibility of knowing it. Freedom of the will is circumscribed within the limits of what one can will. But once the purpose has been formed, the will is no longer free to resist its accomplishment. "Freedom therefore is not and cannot be anything other than the power to do what one wishes." But what one wishes to do is determined by ideas or passions or purposes that arise in the human mind from causes over which one has no control. This conception of freedom is repeated in the article *"Liberté."*

There is always something ironical in a determinist's writing propaganda, for if he is a determinist of Voltaire's kind, one might think that exhortation could have no effect on its hearers' wills. But it should be remembered that Voltaire did think that there was a small area within which man was free to choose, the area in which his ideas might determine his choices. There was thus no contradiction between his arguing that absolute freedom of the will was an impossibility and yet insisting on freedom of speech and conscience. His insistence, which was expressed in dozens of articles and pamphlets, appears also in the *Dictionnaire Philosophique* (see the article *"Liberté de penser"*), and presumably his intention was to supply those ideas which might be accepted by his readers as valid and would, when once accepted, become the determinants of their behavior. One might ask what would determine the acceptance of such ideas, and in that case Voltaire would have no reply. How much faith he had in ideas is itself questionable, for in his article on freedom of the press—*"Liberté d'imprimer"*—he maintains that it is not books but acts that conquer men. "Rome was not conquered by books: she was conquered because she had revolted Europe by her rapine, by the public sale of indulgences; she was conquered because she had insulted mankind, had wished to govern them like domestic beasts, had abused her power to such an extent that it is astonishing to find a single village remaining in her hands. Henry VIII, Elizabeth, the Duke of Saxony, the Landgrave of Hesse, the Princes of Orange, the Condé, the Coligny did everything, books nothing. Trumpets have never won battles and the only walls they have ever overthrown are those of Jericho." Could it be that since books in themselves are impotent, one may as well let them all be printed? This would be a strange defense of freedom of thought and speech.

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[17] I used the edition in the *Oeuvres complètes* (1878).

We shall not attempt to expound all of Voltaire's philosophic ideas since we are doing no more than drawing an outline of the whole philosophic movement of the French Enlightenment. To be thorough one should include an exposition of the French atheism as it appeared in Naigeon, of the ethicists like Helvétius who followed the naturalism of d'Holbach, and of the many themes which were enunciated by Diderot. But our purpose in this book is simply to describe the major traditions as they developed in modern Europe and to include under each philosopher's name only his most conspicuous contributions to them. As the nineteenth century drew nearer, it was not so much Voltaire as Condillac who became the source of the leading ideas of that time, not so much the rationalism of Voltaire as what was sometimes called the sentimentalism of Rousseau. But these features of modern philosophy will find their place in later chapters.

6. The Encyclopedia

The various themes which appeared in the *Philosophes* were popularized through the publication of the *Encyclopedia*. This great work, which began to appear volume by volume in 1751, was largely the production of Diderot, though the early volumes were also edited by d'Alembert, the mathematician. The program of the work was written by him as were certain of the articles, and it is that program which we shall first discuss. As in Bayle's *Dictionary,* the articles were arranged in alphabetical order, an order which might have suggested that learning did not form a logical system—as might have been gathered from the traditional arrangement of such works—but was, on the contrary, a set of atomic bits of information. The editors did not say this and may not have believed it. But no attempt seems to have been made to create a kind of consistency among the articles, and indeed there were no cross references to speak of which would lead a reader to believe that the articles were actually related by logical bridges. In this way it actually anticipated the course of intellectual history. The nineteenth and twentieth centuries saw the steady diversification of the different intellectual disciplines. This diversification arose in spite of the so-called reduction of sciences to logically prior sciences: chemistry to physics, biology to chemistry, psychology to biology. What reduction there was lay in the field of method, not of subject matter; and chemistry is still chemistry, biology still biology, regardless of the fact that they all use the experimental and statistical techniques. We emphasize this point because students of scientific method in those centuries strove to point out the unity of science. But the fact, for instance, that organic matter was proved in 1828—by the synthesis of urea—to have no essential difference from inorganic, did not imply anything more than that it could be studied without invoking life forces and other mysterious and unobservable entities. The outstanding metaphysical achievement of science in these times has been the elimination of inner natures, not the actual reduction of heterogeneous beings to homogeneity. No one, to take another example, could deny that a painting is composed of pigments spread on a canvas or similar surface, and no one could assert that a chemical analysis of the pigments and canvas was a complete account of the painting.

The diversification of disciplines arose from the freedom men felt to ask questions that their predecessors were inhibited from asking. The inhibition lay, in part, in the traditional organization of the sciences, running from ontology, the most general, down. This tradition obtains today in the studies which some scholars make about the proper province of this, that, or the other field of investigation. If, for instance, ontology is the science of being, and there are two kinds of being, material and mental, then one easily asserts that there are two sciences subordinate to ontology, physical and mental—or moral as it was usually called. On the one hand, then, one finds physics, on the other psychology. But when one comes face to face with mathematics, which deals neither with material nor psychological phenomena, one discovers that it must go in a class by itself. One might have supposed that men at this point would question the original division of possible subjects into material and mental, but so strong is the inertia of custom, that few did. What was required was a new conception of scientific investigation. Men had first to see that a science was a set of answers to specific questions, not a body of subject matter in the sense of a field of existent—or for that matter imaginary—beings about which questions had been limited a priori by assumptions about their nature. It is one thing to maintain that physics is the science of matter; another to maintain that it asks questions about the way material things move. Actually no scientist bothered about such problems; all simply went their way, sometimes phrasing their questions in antiquated form,[18] and left it to the philosophers to discover the implications of their method. No one today has succeeded in synthesizing the whole body of scientific knowledge—and by "scientific" we mean "rational"—and only men infatuated with the idea of unity would attempt to do so. My point here is that the *Encyclopedia,* as a collection of articles unordered except alphabetically, was a stimulus to put and answer questions one by one and to envision the work of scholars as the asking and answering of questions in that fashion.

The *Encyclopedia* attempted to fulfill a double role. It was both to expound and explain the interrelations of the various subjects known to man and also, as a "dictionary of the sciences, arts, and crafts," to point out the bases and the most essential details of every science and art, be the latter liberal or, in the language of the time, mechanical. It will be recalled by all who know even the most superficial aspects of eighteenth-century French thought that the sciences and the arts were believed to be reciprocally influential. D'Alembert's *Discours Préliminaire* emphasizes the principle that the two elements of human interest are closely linked together, and it is likely that, just as he believed one of the main problems of philosophy to be the relationship between what he called our sensations and our ideas, so he had a tendency to maintain that the arts in some way not fully explained were an expression of the former and the sciences an expression of the latter. We shall try in what follows to make the importance of this apparently innocent remark a bit clearer.

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[18] The second law of thermodynamics, as it was phrased by Carnot, spoke of energy as if it were a fluid.

Following the familiar route of the eighteenth-century sensationalist, d'Alembert argues that our sensations first put us in contact with an external world and reveal to us in the form of pleasure and pain the good and the bad. We soon learn to seek those things which will produce the good and to avoid those which will lead us into evil. This search reveals to us the existence of our fellow men and we soon discover that only by association with them can our program be carried out. But such an association depends upon the communication of our ideas and out of this necessity arise both the formation of societies and that of language. Both then are to be judged by their utility as instruments of self-preservation. This principle, which is enunciated on the third page of the *Discours,* is, as far as possible in a work by so many hands, the guiding principle of the entire *Encyclopedia.*

Primarily knowledge must center about the problems of preserving the body, either by preventing evils which might happen to it or by eliminating those which have already occurred. Such arts as agriculture and medicine are cited as the bases not only of the survival of primitive societies, but also as the source of all knowledge, even of that which seems especially remote from utility. To trace the development of the arts and sciences from such useful knowledge set a program which both d'Alembert and his successors through the nineteenth century took as a central problem in the history of ideas. It was a principle which we find later in Comte and might even be thought of as the kernel of what is now called the sociology of knowledge. But d'Alembert was a mathematician as well as a social reformer, and he knew very well that some knowledge, and indeed that in which he was particularly skilled, seemed to have no practical value whatsoever. "The mind," he says, "accustomed to meditation and hungry for the fruits thereof, must have found a sort of stimulation in the discovery of the properties of bodies which were simply curious, a discovery which knows no bounds. In fact, if a large number of agreeable bits of knowledge sufficed to console one for the privation of a useful truth, one could maintain that the study of Nature when it refuses to satisfy our needs gives us at least a profusion of pleasures . . . Furthermore, among our needs and the objects of our passions, pleasure holds one of the foremost positions, and curiosity is a need for him who knows how to think, above all when this restless desire is animated by a sort of annoyance at not being able to be completely satisfied." Thus a great number of things are discovered simply because our curiosity concerning the useful cannot be assuaged. But here, too, we are likely to maintain that even the most apparently useless knowledge will some day give rise to utility. This, says the mathematical physicist, is the source of that vast science known as physics or the study of nature.

The inconsistency in this attitude is obvious. It is an inconsistency which is common to the historian who does not believe that an idea can itself have a history, that societies may preserve instruments which originated in utility long after they have become obsolete, that human beings sometimes deceive themselves into thinking that a symbol when it is retained cannot change its reference. D'Alembert's plain weakness was either his refusal to grant that simple pleasure was itself a utility or that the human mind early in its career found that logically consistent systems of thought turned out to be more useful, in the sense of applicable, than inconsistent collections of ideas or random practices. In any event d'Alembert as early as the fourth page of his *Discours* turns his back on the principle of utility and from then on speaks of both usefulness and amusement as the twin sources of knowledge. On this basis he is able to reconstruct the rise of all the sciences. But there is a second conflict in his ideas. The *Encyclopedia* was an instrument of public education. One of its main purposes was the reform of social abuses, most of which, its writers believed, could be cured by knowledge. But d'Alembert was far from maintaining that all men were equal in their potentialities for knowledge; on the contrary, he was emphatic in stating that there was such a thing as innate genius, a gift of Nature, not of Art. Speaking of the orators, for whom he seems to have a great respect, he says, "[Eloquence] which was created to speak to our feelings, as Logic and Grammar speak to the intellect, imposes silence on the reason itself, and the marvels which it works in the hands of a single man upon a whole nation are perhaps the most brilliant testimony to the superiority of one man over another. What is most peculiar is that it has been believed possible to replace so rare a talent by rules. That is almost as if it were desired to reduce genius to precept. He who first maintained that we owed our orators to art was either not of that number or was most ungrateful to nature."

The sciences, whatever else they may be, are reflections of our ideas about real external objects. But there is another side to our reflections. We sometimes compose in our imaginations beings similar to those which are "the object of our direct ideas." This is what is known as the imitation of nature, or the arts. At the head of the list come painting and sculpture, for they most adequately imitate the objects which they represent. Architecture follows, though the object which it imitates is not so obvious, being the symmetry and order which are to be found in every natural object. Poetry comes next, speaking to the imagination rather than to the senses, and creating rather than depicting its objects "by the warmth, the movement, and the life which it bestows upon them." Finally there is music, which is addressed to both the imagination and the senses, which in origin probably represented mere noises, but which evolved into the condition of a language capable of expressing the passions or even sensations. For though the objects of perception may differ as they are perceived by our different sense organs, all perceptions originating in a single object are alike in the feelings of pleasure or displeasure which they cause us to experience. What now is the distinction between the arts and the sciences?

Any system of knowledge to which it is possible to give rules which are "positive, invariable, and independent of caprice or opinion," is an art, and thus several of our sciences are arts when looked at from the point of view of their applicability. Some of the arts need but manual skill for their execution; these are called mechanical arts. Others require the force of the intellect or soul; these are called liberal arts. D'Alembert here continues the Renaissance tradition in his terminology, a terminology which roughly corresponds to the modern distinction between the arts and crafts, or that between the fine and the useful arts. But he was far from believing that there is in principle any inferiority in the mechanical arts, and indeed many of the most famous articles in the *Encyclopedia* were given over to them.

Among the fine arts there are two classes: those whose rules may be codified with exactitude, such as the arts of grammar, logic, and ethics—the classification is of the greatest historical interest—and those for which no rules are possible, except on the mechanical side, for they spring from natural genius. That grammar, logic, and ethics are arts and not sciences and that precise rules for their formulation are possible are two principles which lie at the very foundation of the program of the *Encyclopedia*. It is unlikely that any Frenchman of the eighteenth century would have rejected the idea that grammar and logic were susceptible of precise codification, but we must not forget the disputes about the origin of language which were current at the time and which were to play so large a part in the polemics made by the Traditionalists later on against these very Encyclopedists. That language was a human invention and neither the expression of a universal and innate logical power nor a divine revelation was one of the reasons why secular education, divorced from ecclesiastical supervision, was a plausible program. That logic was an art rather than a science implied in the long run that it could be improved, that the scholastic method was not uniquely fruitful, and finally that its systematic structure was in no sense of the word a faithful portrait of the structure of the universe. D'Alembert had already expressed his doubts about the axiomatic method in mathematics. He had suggested, but with some caution, that formal reasoning was always tautological, a point of view which had to wait for the passage of almost two centuries for more general acceptance, though anticipated by Leibniz. "What are most of those axioms of which Geometry is so proud," he asked, "if not the expression of a simple and single idea by two different signs or words? Has he who says that two and two are four more knowledge than he who would be satisfied with saying that two and two are two and two? Are not the ideas of whole, part, of greater and less, properly speaking the same simple and individual idea, since one could not have the one without the others presenting themselves all together at the same time?" That being so, the utility of mathematics is evident: it is the clarification of primitive ideas; and, when one thinks of what the influence of the geometrical method had been in France, one begins to see the importance of d'Alembert's suggestions. But the greatest shock to the reader must have been delivered by the placing of ethics among the arts. For clearly if precise rules of being and doing good could be given, virtue could be taught from a book, and in that case all the discipline of religion became superfluous.[19]

This emerges more definitely when d'Alembert discusses the three activities of the human being: history, which is related to memory; philosophy, which "is the fruit of the reason"; and the fine arts, which owe their birth to the imagination—here d'Alembert drops his previous principles of classification. Of these three, reason has first place, not in the sense of its occupying an otherwise undefined higher position in a hierarchy, but in the sense that it should and can control the operations of the memory and the imagination lest they fall into error. There is no denial of the fact that both the imagination, by which d'Alembert means the creative imagination, and memory are needed by the reason if it is to have anything to reason about, but the notion that was to be expressed later, that an artist had only to let his imagination run freely, uncontrolled by either observation of fact or plausibility, was entirely foreign to d'Alembert's manner of thinking. Yet he never succeeded in absorbing what he called genius into his system, and he never denied that the fine arts formed a class of human activities which could never be completely codified except on the manual side. We find the same conflict of ideas in the various articles concerning the arts which occur in the body of the work. Yet that works of art must follow the prescriptions of the reason never fails to appear when it is a question of criticism. Thus even in the *Explication du Système des Connaissances* we find that "poetry like Nature has its monsters; here must be classified all the productions of the ungoverned imagination *(l'imagination déréglée)* and such productions can be found in all types of art." [20]

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[19] It should not be forgotten that *la morale* included economics, politics, and jurisprudence, defined respectively as *la science des devoirs de l'homme en famille, celle des devoirs de l'homme en société, et celle des devoirs de l'homme seul* (*Encycl.* Volume I, 1751, p. xlix).

In spite of conflicts such as this and others of a similar nature, the *Encyclopedia* did have a program to which, on the whole, it was faithful. That program first was aimed at producing the new man through education. This was, of course, at least as old as Bacon. If men are to be kept in ignorance, then they will remain superstitious and therefore vicious. That vice arises from ignorance is an idea which runs back to Socrates, but one which had been obscured by the traditions of authoritarianism. Neither Socrates nor his most distinguished pupil would have admitted that the simple possession of true ideas was in itself of much use; to them knowledge was more than true opinion. One of the great lessons of the Dialogues was that each man must find out the truth for himself. And behind this lay the assumption that each man was capable of finding it out if he were properly educated. The authoritarian method at most could give men true opinion, but since it never attempted to give them the technique of discovery, but limited its educational program to passing on the technique of exposition, it must be granted that its supporters maintained that the discovery of new truths was impossible anyway, since all truth was already known. The Encyclopedists, however, knew that the frontiers of knowledge were being steadily pushed back, and their fiercest attacks upon the Church were made because they believed ecclesiastical authority was opposed to such explorations. To say that no man does wrong knowingly would seem to imply that the elimination of ignorance would be the elimination of vice. But suppose that one outstanding vice is precisely the desire to know, the vice of pride which some of the Fathers had attributed to Adam and Eve and which had been the cause of our universal lapse from grace? In that case it should require no lengthy argument to show that the gap between the Encyclopedists and the Church would never be filled. Few, if any, of the Encyclopedists were willing to assert that man's knowledge either was at the time of its publication complete or would ever be completed. But all maintained, as far as I know, that we should all strive to make it as complete as possible.

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[20] Cf. Diderot's description of two paintings, one made according to the rules, the other by a genius, in the article "Manichaeism," Vol. X, p. 25. It occurs in a discussion of Leibniz.

Knowledge, however, was to be interpreted as descriptive knowledge. The universe as a whole was in essence intelligible; its only mysteries were of the nature of the as-yet-unexplored. These regions were no different from any other in nature; the same methods which had been successful in solving the problems that had already been solved would be successful there too. And one could look forward to a steadily increasing body of acquired descriptive knowledge. Herein lay the hope for the famous indefinite perfectibility of mankind. That hope, as far as it was confined to man's intellectual, as distinguished from his moral, life was indeed constantly fortified. Men have succeeded in increasing their scientific knowledge. And to some extent they have increased the decency of their lives and their regard for their fellow men. Whatever one may say against the program of education as the solution of our moral problems, few would maintain that it would be desirable to return to the condition of the generation of 1750. It is stylish nowadays to rail against science as the universal scourge, but it should be pointed out that at bottom the quarrel is that between the proponents of ignorance and the proponents of knowledge. One can be neither kindly nor even truthful—virtues which most men, however sophisticated, are willing to praise—in ignorance. If the Socratic dictum identifying knowledge and virtue is wrong, that is because men are still largely in ignorance of what they will call virtuous. Were the Encyclopedists in error in urging that men try to found their ethics on knowledge rather than on opinion? If obedience in itself is the supreme virtue, then they were. But if man's reflection of his divine origin lies in his reason, then it is hard to see why these men should be accused of anything worse than charity.

A third element in the program was the belief that all knowledge is useful, an element which also was found in Bacon. The utility of knowledge was probably the reason why so much attention was given in the *Encyclopedia* to the arts and crafts. The famous anecdote of Mme de Pompadour looking up in the *Encyclopedia* the article on powder,[21] since she and her friends were constantly using things of whose origin they knew nothing, could no doubt have been repeated in a hundred French circles of the time. The volume of plates is today a unique source of information on the machinery in use in the eighteenth century; and the articles on the arts, with their emphasis on the moral effect of painting, sculpture, music, and so on, tried to give to activities that might have been thought of as frivolous a serious purpose. Finally it should not be forgotten that the propaganda in favor of the inventors and artisans was something which in the nineteenth century was to instill in men's minds the notion of the "dignity of labor," a notion which may have been ill-founded in 1751 but which when taken seriously was to spread the idea that labor was not simply punishment for the sin of Adam but inherently worthwhile. This at worst is a useful social myth, one of Ibsen's vital lies. But, since the gradual industrialization of Occidental society has taken place, we have all become either laborers or intimately associated with laborers, and the egalitarianism which has resulted, however disagreeable to some, has been accepted cheerfully by the majority as an improvement over the lot of their ancestors. When it is taken for granted, as it is in the United States, that every able-bodied person "does" something, the life of man is no worse, and probably is better, than that in a society where a minority lives on the labor of the majority who themselves enjoy few of the fruits of their toil. But if I am right about this, then we owe it in part to the propaganda of the *Encyclopedia.* "Put on one pan of the balance," said d'Alembert, "the real advantages of the most lofty sciences and the most honored arts, and on the other those of the mechanical arts, and you will find that the esteem given to the one and to the other has not been allotted justly, that people have praised more highly those men who busied themselves with making us believe that we were happy than those engaged in making ourselves so." [22]

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[21] This can be found in several places, but perhaps the best documented is the account given by the Goncourts in their *Madame de Pompadour* (nouv. éd.; 1881), p. 176.

[22] From the article "Art," unsigned but probably by d'Alembert.

CHAPTER 10

Early Versions of the Philosophy of History

THE middle of the eighteenth century saw the emergence of a new philosophical interest, the philosophy of history. One can find philosophies of history in ancient times in Hesiod and Aratus, in Lucretius, in St. Augustine. Each of these was different from the others, and each formed a type which was to have its proponents and opponents later on. The Hesiodic view of history was that of progressive moral degeneration; that of Lucretius was a theory of progressive improvement; that of St. Augustine was an attempt to attribute the fortunes of states to the moral character of the people who composed them. In general, from the time of St. Augustine up to and including that of Bossuet, Christians seemed committed to the view that obedience to God's commandments was the clue to a people's success or failure on earth. The City of God stood as a model for the City of Man, and the latter might either approach its model or swerve away from it as rulers and the governed were faithful to their divine King or faithless to Him.[1]

Roughly speaking, history becomes a problem when the changes which obviously have occurred in human ways of living seem real rather than apparent. Hesiod, for instance, accepted the myth that in primordial times men were actually better morally than they were in his own time and that they had lived through a series of ages which, with one exception, were steadily worse, until his contemporaries had become as bad as men could be. What explanation could be given of this? Hesiod was far from being philosophic in his method of treatment; he was, as far as we can tell, simply relating a story in which he believed. In Aratus also, though the moral degradation of man is more clearly emphasized as the source of historical change, no reason is given why man should have fallen from his state of primitive felicity. In Lucretius, though the strains of primitivism and anti-primitivism are mixed, when he comes to his theory of progress, he mentions in some detail the steps in the amelioration of man's lot, attributing most of them to technological discoveries, but, again, giving no explanation of why man should either have made them or why, once made, he should have retained them. Fire was discovered by accident; but why should man have used it? Speech arose out of instinctive animal cries; but why did it not remain in the condition of animal cries? Similarly St. Augustine can give no satisfactory reason why our first parents should have fallen, why sin should have had more charm for them than virtue, nor why, when men had once seen the effects of sin, they should not have learned from experience that obedience to the divine law was better than disobedience to it. In the long run both the Hesiodic and the Augustinian philosophies of history are centered about a mystery, but in that they do not differ from the theories of progress. The basic fact which confronts all men interested in the subject is the difference between men and beasts in this respect. The beasts may be said to have had no history whatsoever; the bees of today are like those of ancient times; the ants still construct their anthills and the wasps their nests as they always have. But mankind has changed his ways of living in almost every field: his type of government, his cities, his arts, his language, his thoughts. If, on the one hand, we find living beings who do not change, and, on the other, those who do, then we can properly put the question of the cause of this strange difference.

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[1] For theories of history in classical antiquity see Arthur Oncken Lovejoy and George Boas, *Primitivism in Antiquity* (Baltimore: Johns Hopkins Press, 1935). For scattered views of medieval thinkers see George Boas, *Essays on Primitivism and Related Ideas in the Middle Ages* (Baltimore: Johns Hopkins Press, 1948).

Clearly the first step toward a philosophy of history is plotting the changes; the second—though by no means a logical implication of the first—the evaluation of the changes morally or otherwise; the third, detecting the cause of the changes. Such causes might be the intervention of some outside force, such as those disasters which are usually called with unconscious cynicism acts of God. Floods, earthquakes, droughts are external in the sense that man does not produce them, though an Augustinian would maintain that by his sins he did produce them indirectly. They are divine interventions in human affairs over which man does not seem to have control. If the climate changes, as it appears to have some millennia ago from a tropical warmth to polar cold, then obviously man must either meet the challenge of the elements or die. If, however, the cause of historical change lies within human nature itself, then no causal explanation in the strict sense of that term can be given; one can only trace the changes, see what order may be in them, and point out what feature of human life is itself responsible for the changes. Such features may be the steady and inexplicable increase in knowledge, both technological and scientific or their opposites; they may be the inevitable senescence of that happy invention, the Race or Nation itself. By thinking of Races or Nations as individuals, one can attribute to them the usual biological fortunes of birth, growth, senescence, and death. They may be simple animal impulses which orient man toward self-preservation, the need for which he does not question and which he satisfies at all costs. They may be inherent wickedness or inherent goodness, impelling men to satisfy their desires without criticism. But whatever the formula utilized by the philosopher, he will apply it only when he has become convinced that the changes in human history are so great that the homogeneity of the race can no longer be accepted. It would have been possible, to be sure—and that possibility has occasionally been realized—to deny the validity of any philosophy of history, and to maintain that however profound changes have been, they have never altered the universal nature of mankind. That theme has been echoed more often in aesthetic history rather than in social. The arts have frequently been said to be an expression of that which never changes, an expression of those inherently universal motives, desires, ambitions, hatreds, and loves of the human being as human. Almost any history of literature, for example, will speak of the unity of themes in poetry from Homer down to whoever is held to be the representative poet of the writer's time. In political and social affairs this is a harder thesis to justify. The modern state is identical with the ancient classical state, to say nothing of the states of so-called primitive communities, only in the trivial fact that in both there are individuals who govern and individuals who are governed. That the details of government and even the constitutions are sometimes called by modern names merely shows how poor our vocabulary is and how we have retained the names invented by Plato and Aristotle, usually by simple transliteration of the Greek, without stopping to think of the profound differences in their meanings.

By the middle of the eighteenth century there was too much evidence of novelty for it to be denied reality. The discovery of the New World with its strange peoples and civilizations, the growing knowledge of China, the revival of interest in classical historical texts, such as those of Thucydides, Polybius, and Livy, must have convinced many scholars that the homogeneity of mankind was an illusion. Technological inventions were too many to pass unnoticed and they were not unnoticed. Just as Lucretius and many of his predecessors gave long lists of those improvements in human fortune attributable to man's inventive ingenuity, so a writer like Agricola in his *De re metallica* (1556) could even extol the benefits of mining, a practice which was almost universally picked out by primitivists for condemnation. Louis Leroy, in his *De la vicissitude et variété des choses en l'univers* (1575), where he actually is trying to illustrate the resemblance of the Moderns to the Ancients, gives long lists of inventions which have been made since the Renaissance. Scientific discoveries were beginning to accumulate, and by 1750 there was enough novelty in the sciences to make men question the authority of most traditional doctrines. The arts themselves, architecture, painting, sculpture, drama, and music, had all developed to a point where no man living in the thirteenth century would have been able to recognize them. Any history of science, the arts, or philosophy will provide striking illustrations of the difference between their subjects in the eighteenth and, let us say, fourteenth centuries. The question of the profundity of the changes could scarcely have been avoided. And whether anyone was prepared to explain why they had come about or not, the fact that they had come about could not be dodged.

1. Vico

The man usually credited with having introduced the philosophy of history into modern thought is Giambattista Vico (1668–1744). His *Principles of a New Science* [2] did indeed present a novel outline of history to its readers, and though its author was more or less neglected until our own times, in spite of Michelet's efforts to popularize him in 1822, he was read by Montesquieu, Herder, Goethe, probably by Joseph de Maistre, certainly by Auguste Comte.[3] Not only did the title of Vico's work indicate its supposed novelty, but he was fully conscious that his point of view and his conclusions were new.

One of the most interesting features of the *New Science* is Vico's attempt by means of a chart to make a comparative study of the development of the various people whom he knew: Hebrews,

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[2] First edition, 1725; second, greatly expanded, 1730. We use the edition of 1744, the last, hereafter *S.N.* A complete translation of this work, *New Science,* was published in 1948 by Thomas Goddard Bergin and Max Harold Fisch (Ithaca: Cornell University Press).

[3] For a detailed statement of his influence see Nicolini's edition, *Storia della Fortuna: Cenni,* pp. xx–xlvi.

Chaldeans, Scythians, Phoenicians, Egyptians, Greeks, and Romans. It is obvious that he could find little recorded history of some of these peoples; the Scythians were, for instance, largely legendary figures. But the importance of the technique lay in its comparative method, by means of which he thought that he could disprove some of the generalizations and conclusions made by previous chronologists and historians. But it is also supposed to substantiate one of his cardinal principles: that the first age of history is that of religion or of the gods; the second, that of heroes; the third, that of men (*S.N.*, Bk. IV, Intro., p. 769). The threefold division of ages runs parallel to three kinds of "natures," three kinds of customs, three kinds of natural law, three kinds of government, three kinds of language, of linguistic characters, of jurisprudence, of authority, of reason, of judgments, of cultural epochs (*sètte di tempi*). The parallelism is strained to fit the system, but Vico's purpose is to show that each age has what the Germans were later to call a *Zeitgeist,* which thoroughly permeates the works of those beings who were on their way to becoming human. We shall not follow the text thoroughly but simply illustrate Vico's doctrine with a few examples.

Thus the three kinds of natures, the religious, the heroic, and the human, are described as follows. The religious nature is strongest in those in whom reason is weakest; it was poetic or creative, and animated all things by spirits or gods. We find it in the "theological poets," who were the earliest pagans to express their wisdom at a time when each pagan nation had its own god. It was a fierce and cruel nature and the very gods who had been invented by these men were objects of terror. From this age two principles have survived: that "religion is the sole means powerful enough to check the ferocity of peoples," and that "religions prosper best when those who preside over them are themselves inwardly reverent." The principle that in the earliest period of history men were "theological" was to be revived by Comte in the early years of the nineteenth century, anticipated oddly enough by Turgot in 1750. The second nature, the heroic, was believed to have been conferred on men by the gods. The heroes thought themselves the children of Jupiter and, in contrast to their predecessors on this earth, saw in their heroic nature something of natural nobility. They were proud of this and rightly, since they had abandoned the bestial life of their predecessors. The third nature, the human, is intelligent and therefore modest, benign, and reasonable, recognizing the claims of conscience, reason, and duty. It is perhaps obvious that the three natures represent progress toward a better state of affairs and that the goal of progress is what Herder was to call "humanity." In other words, though the beings whose development Vico is tracing can only be called men, they are closest to animality in their primitive condition and are called human beings simply because there is no other name for them. There is a hint of this also in the three sentences that describe the three kinds of customs, wherein the third is inspired by a sense of duty, and the individuals are self-taught by their sense of duty; whereas the first kind of customs is that of people who are filled with religion and piety but a religion and a piety which come from without, presumably from the gods. This interpretation is strengthened by the description of the three kinds of natural law, the first of which is believed to be laid down by the gods and the last by human reason. Similarly the history of governments progresses from the original stage when all government is theocratic, to the second which is aristocratic, and the third which is human. In this third stage all men are equal before the law for the laws are an expression of the intelligent nature of man.

A second feature of Vico's scheme seems to provide for the survival into later stages of some of the characters of earlier. In the heroic age there are left survivals of the divine or religious age, as in the human age there are survivals of both the religious and the heroic. This is presented overtly in the section on "proofs taken from the determination of the character of commonwealths from the character of those preceding them." Thus in the heroic age, when aristocracies were the rule, the heads of families retained the power which they had in the religious period. This is an important qualification of the idea of a *Zeitgeist,* for if it is to be taken seriously, and unfortunately Vico did little with it, no age will be a pure form and the survivals of earlier ages may well be in conflict with the new conditions which are emerging. If this is general, then it is not the people as a mass who progress from bestiality into religion, from religion into heroism, from heroism into humanity, but certain individuals whose influence is great enough to spread throughout most of society and to give it its dominant traits. But the mechanism by which an age acquires a homogeneous character is not made clear by Vico, probably because he thought that the course of history was determined by God who for reasons unexplained laid down a law of historical development as fixed and immutable as the laws of physics. If there is any reason given by Vico why men were not established by their Creator in the human condition, I have failed to discover it. But we shall see that in this, as in many other details, Herder also agreed with his Italian precursor.

One of the most influential parts of Vico's philosophy of history was his idea that the first literature was poetry, as the first philosophy was mythology. Poetry and mythology become for him the initial stages of thought. Abstract thinking is a development out of poetry and mythology, and in this notion we see the beginnings of an idea which gained currency only in our own times: that the philosopher must pay as much attention to the basic metaphors which are used as a mold of thought and to the syntactical structure of our linguistic expressions as he would to the supposed substance abstracted from the form in which it is expressed. It would thus be possible for a single idea to be expressed in myth, in poetry, and in metaphysics. In discussing theology, for instance, Vico says (*ed. cit.,* Bk. II, par. 366, p. 496) that it is found in three forms: (1) poetic theology, that of the theological poets "which was the civil theology of all the pagan nations"; (2) natural theology, which is that of the metaphysicians; (3) Christian theology, "a mixture of civil and natural and of the highest revealed theology, and all three are conjoined in the contemplation of the divine Providence." The substance of all three is the same, but the first was discovered through sensible signs, "believed to be divine as sent from the gods to man," the second by eternal reasons which are not sensory, the third by force of a supernatural faith which is superior to both sensory perception and human reason. The immanence of all knowledge in even the earliest stage of human thought is shown in what he says of poetic wisdom. Out of it grew as from the trunk of a tree[4] logic, ethics, household management (economics), and politics, which formed one branch; and physics, the mother of cosmography and thence of astronomy, chronology, and geography. Each of these branches flowered in metaphysical form and presumably, though the elaboration of the metaphor is ours, not Vico's, out of these metaphysical flowers came the seeds of Christian thought. "In such a way this Science becomes at one and the same time a history of the ideas, customs, and deeds of the human race. And from all three we shall see emerging the principles of the history of human nature, and these are the principles of universal history which as yet has lacked its principles" (*ed. cit.,* Bk. II, ch. ii, par. 368, p. 497). That the same idea can be expressed in three ways was a notion which would not have been repugnant to anyone who had been educated in Christian exegesis, for as early as Clement of Alexandria, every biblical verse had several meanings. But whereas the exegetes who looked for literal, allegorical, and anagogical significance in their texts found three meanings for one set of words, Vico found one meaning for three sets of words. This meaning was but dimly seen by our primordial ancestors. For poetic wisdom was not reasoned and abstract, but felt and imagined (*ibid.,* par. 375, p. 502). Yet these early poets believed literally in their poetry, and when they said that thunder was the voice of a god, they believed in and feared the god. The gods were--the language is mine not Vico's—a projection into external reality of men's poetic fantasies. The cosmos can be described only in a set of pathetic fallacies, but as soon as the mountain frowns and the brook babbles, the mountain and the brook are endowed with divine beings to do the frowning and the babbling. If this becomes a general way of thinking—though "thinking" is hardly the precise name for it—all things and events will be thought of in the same way and it will make little difference whether one is describing a landscape or inventing a political constitution.

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[4] We shall see below how Herder, too, constantly used the metaphor of vegetable growth as a paradigm of historical development.

In keeping with his idea of poetic wisdom, Vico asserts that writing came before speech, and since the first characters were hieroglyphics, or pictures, they were an exact counterpart of the images which the poetic spirit had already formed. It is a cardinal principle of the *Scienza Nuova* that the first men communicated with one another by means of gestures or material objects that might signify certain acts. (The example Vico gives is three ears of wheat or making the gesture of swinging a scythe three times to signify three years.) These primitive hieroglyphs took on symbolic meaning and thus could be used for communication in place of the things they symbolized. Articulated speech followed later and began with interjections, but this fantasy of Vico's will tell us little of his philosophy.

There is to be found in Vico's axioms, given in Book I, one which establishes a basis for his theory of human development. It runs, "Uniform ideas springing up among entire peoples unknown to one another must be based upon a general truth." [5] This is a reproduction of the ancient Stoic idea of common sense, which was to reappear in the Scottish School at the end of the eighteenth century. If, then, several peoples isolated from one another have the same ideas, those ideas must be true. Vico applies this principle to "the natural law of peoples," not to matters of physical fact, but apparently there is no reason why it should not be universally applicable. Since ancient mythologies have certain common characteristics—creation myths, myths of the origin of man, various metamorphoses, aetiological myths of all sorts—one ought not only to discover the common nature of primitive man from a study of comparative mythology and language, but ought also to discover a residue of truth in what these myths and linguistic customs express.

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[5] In Italian this runs: "Idee uniformi nate appo intieri popoli tra essoloro non conosciuti debbon avere un motivo comune di vero," *ed. cit.,* Bk. I, par. 144, p. 439.

And since Vico is above all interested in determining the spiritual character or the minds of such peoples, the study of mythology and philology seems to him of paramount importance. For it shows him the poetical and imaginative character of early peoples and, similarly, when their myths are similar also shows him what they believed to be true, and indeed what was true. Thus he can prove that there was a universal deluge, not merely on the basis of *Genesis* vii but also on that of the story of Deucalion and Pyrrha; and the existence of giants on similar evidence. It would seem to follow that, when a myth is found in only one region or among one population, it must be false, unless it could be demonstrated that previously it had been held by all or most peoples. Vico does not seem to have seen this consequence of his position and it is all the more interesting in that the form of monotheism which is expressed in the books of the Hebrew prophets was far from being universal and yet was, according to him, true. In fact, in his chapter on the general idea of his work (*ibid.,* par. 9, p. 373) he distinguishes between the natural law of the Hebrews and that of the pagans in that the former was revealed through the angels or prophets, whereas the latter was found in "sensible signs." The difference is certainly important, and just as certainly Vico believed in the Hebraic law rather than the pagan. Yet he fuses the two concepts together by pointing out that all primitive peoples believed natural law to come from a source which they called divine, meaning by this adjective something which could be foretold (*divinari*). In his anxiety to prove the universality of an idea, he rises to a level of abstraction in which what he himself calls a *fondamentale diversità* is overlooked.

The human mind, he says (*ibid.,* axiom 47, par. 204, p. 452), is naturally given to delight in uniformity. This is perhaps the least disputable of all his axioms, but a little more resistance to the delight would have saved Vico himself from neglecting differences which might weaken his generalizations. He utilizes it to bring out the common significance of fables and, by his principle of the truth of common assent, to attribute to this common meaning absolute truth. Poetic truth thus becomes metaphysical truth and metaphysical truth becomes physical truth. He is clear in rejecting all supposed physical truth that is not harmonious with its two predecessors in time. A second axiom (*ibid.,* axiom 48) identifies primitive people with children who associate the names and ideas of the first people and things which they have encountered with everything encountered later which has any resemblance or relation to them. A third axiom (*ibid.,* axiom 49) notes that according to Iamblichus, the Egyptians attributed to Hermes Trismegistus "all discoveries useful or necessary to human life." These three axioms, he concludes, "give us the principle of poetic characters," that is, the poetic methods of communication. "The first demonstrates the natural inclination of the mass of people to invent [fables], and to invent them properly [*con decoro*]. The second demonstrates that the first men, the childhood of the human race, not being capable of forming intelligible genera of things, would naturally need to invent poetic characters which are genera or universals of fantasy, from which are derived, as from safe models or even ideal portraits, all the particular species resembling them in their generic traits. By means of that resemblance the ancient fables could be invented only properly. Thus the Egyptians reduced all their discoveries which were useful or necessary to humankind and which are the particular effects of civil wisdom to the genus 'civil wiseman,' whence the fancied image of Hermes Trismegistus, for they did not know how to abstract the intelligible genus of the 'civil wiseman,' to say nothing of the form of civil wisdom through which these Egyptians became wise. So remote were the Egyptians when they were enriching the world with discoveries necessary or useful to the human race from being philosophers and from understanding universals or intelligible genera" (*ibid.,* par. 209, p. 453). Thus we see that the identification of the human race with the growth of a human being lay behind Vico's thought, an identification, however figurative it might be, which has not as yet been abandoned by philosophers of history and which served Herder and Comte as well as their Italian predecessor. The notion that poetic characters were images probably is derived ultimately from Plotinus's famous passage in *Ennead* VIII, Bk. V, 7, in which he maintained the hieroglyphics to be concrete presentations of Platonic ideas. The attribution to individual human beings of all inventions was also the only way in the childhood of the race by which one could gather together under a single name a variety of things, and this was again analogous to Comte's theory that the child-mind, whether individual or social, could operate only in terms of human wills. Thus grain, for instance, becomes a *cereal,* that is, an invention of Ceres, and the art of sowing grain becomes an invention of Saturn, whose name, to be sure, has a resemblance to the Latin word for one who sows, *sator.*

Whatever the similarities between Vico's thoughts and Comte's, and they are very great, there are also important differences. For instance, the three stages of knowledge for Vico are expressed as follows in his Axiom 53: "Men first feel without observing [*avvertire*], then they observe with minds perturbed and stirred by emotion, and finally they reflect with pure minds" (*ibid.,* par. 218, 455).

The progress thus is from emotion to clarity of idea, not from clear notions of culture heroes or semidivine and divine wills, through metaphysical abstractions, to positivistic perceptual observations. The poetic character then, if Vico is consistent, must be essentially a conveyer of feeling. Yet out of this feeling comes factual truth. How this happens is not clarified by Vico, though he does say that the first languages dealt with bodies perceived by the senses, and that this kind of language was preceded by gestures. Words, since they arise after the language of gestures, are impregnated with feeling; but, since the men who invented them attached them to objects, they must also have had some perception of objects. One can, to be sure, be frightened or pleased without having anything like a clear perception of the object causing one's fright or pleasure, as when one is terrified of the dark or pleased by the fresh smell of dewy grass in the spring. Whether Vico observed the growth of a child's "ideas" or not, I do not know, but it is quite probable that children first are aware of their inner bodily states and of the feelings associated with them. But, that this is also true of the race as a whole no one knows, nor is there any way of finding out, since all human beings of whom we know anything have fully developed languages. One cannot repeat too frequently that the whole notion of racial cultural evolution with its assumption of primitive beings is but an assumption, an assumption which may have been justified in the nineteenth century but which can be accepted only with the greatest caution in the twentieth. In any event, Vico's axioms are about as consistent with his basic metaphor of growth as one could expect. He is willing not merely to assert the development of a people but also its decline. By Axioms 66 and 67 (*ibid.,* 70) we find that "Men first feel needs, then look for the useful, then observe the fitting, then delight in pleasure, from which they become dissolute in luxury, and finally turn to folly and waste their substance"; and "The nature of people is first raw, then severe, then benign, then delicate, and finally dissolute." Each of the stages in the latter axiom corresponds to one in the former; rawness with necessities, severity with utility, benignity with the fitting, pleasure with delicacy or interest in *deliciae,* dissoluteness with luxury, after which comes madness. The final stage, we see, is far from being that happy period which more optimistic people such as Herder and Condorcet or even Comte were occupied with establishing.

Vico's account of human development bases its explanation of historical change on the natural growth of a people's collective mind. It is not divine interference or man's relation to God which clarifies the course of human events. What man does he does because of his knowledge of the world about him. The human mind itself, not the environment, changes by a natural development, just as an individual grows. No explanation is needed for its growth; that is simply the basic fact. That the human mind does not always operate in the same way, according to Vico, can be proved; that the changes move from worse to better is true only in the sense that clearness and distinctness of ideas, the formation of true ideas of a universal nature, and the derivation from them of philosophic laws are better than fables and myths. That human history is to be interpreted as mental evolution does not die out until the time of Karl Marx, to whom the material elements of culture are of primary importance, those elements being interpreted as the means of production. The second thinker in the Vichian line is Herder, who was born in the year that Vico died. His similarities and dissimilarities to Vico will be considered next.

2. Herder

Vico's *Scienza Nuova,* in spite of its title, was less of a science than a rhapsody. Its basic data are often wrong, which was understandable in 1725; its organization was uneven; its demonstrations unconvincing; its leading ideas so vague that it is next to impossible to expound them and feel that one has done more than give one of many possible correct interpretations. The principle of common sense which is a test of truth, with its assumption that all men cannot be wrong even about matters of fact, would lead to the most fantastic geological and biological theories. The principle of poetic truth, though it has once more gained credence, is not for that reason any more plausible than it was in Vico's time. Neither its modern proponents nor its ancient have ever been able to set down clearly any test by which we may know whether or not we have the correct literal translation of its supposed ideas. As in allegorical interpretation, of which it seems to be a species, who knows when he has the right key? The principle of ages which are "spiritually" homogeneous admittedly has to be modified by recognizing that survivals of previous ages and anticipations of later are always to be found, and that their presence is not without influence on the ideas, arts, superstitions, goals, even linguistic habits of each period. These and other obvious objections can be made against not only Vico's philosophy of history but against its descendants as well. And yet it also conferred certain benefits upon modern thought. It suggested to human beings willing to read that each culture must be understood in its own terms and that there is no such thing as universal human culture good for all at all times. The variability of ideals, the variability of intellectual techniques, the variability of standards of right and wrong, beauty and ugliness, were all worth emphasizing at a time when universality was being accentuated in spite of growing evidence to the contrary. We may no longer feel easy in an evolutionistic social and cultural history, but the pattern that was being drawn by Vico seemed to many men of great intelligence to be the design which all history described.

The clarification of Vico's method and scheme was aided by the German Herder (1744–1803). Though he himself mentions Vico but late in his career,[6] it is unlikely that he had not studied him closely, for the similarities between the two are too close to be accidental. Both believed in an early period of history when men expressed themselves poetically; both saw in the development of language one of the secrets of historical change; both saw history as "spiritual expression"; both believed, though in this Herder was clearer than Vico, that the history of each people moves in the direction of what they called Humanity.

One will find in Herder a constant emphasis upon the metaphor of growth, best exemplified in the growth of plants. A plant at that time seemed to be the unfolding of potencies which were contained within the seed, and when Swammerdam, after studying the development of insects, formulated his theory of preformationism, it became normal for men to think of living beings as somehow growing by expressing outwardly that which was already contained within them. Certain external forces, such as food, were needed for this exfoliation to occur, but that which was exfoliated did not come from the external world at all. As a metaphor for man's spiritual life it thus gave room for dwelling on the richness of his inner nature; no mechanical causes for development were required; and a certain air of mystery was retained which was far from being displeasing to those men who hated the rationalism of the *philosophes*. The rationalist could not explain the constant pattern of each species' growth; he simply traced it and left it as a fact. He could give reasons for its failure to be realized but none for its success. The antirationalists needed no reason. The repeated patterns of growth became an expression of those inner natures which empirically minded philosophers frankly confessed they could never know. When Herder says, "Nations bloom and their blossoms wither away *(bluehen auf und ab),*" he can lay this down as an axiom since he has taken over bodily the metaphor of the life cycle. No dying nation ever gives birth to a new nation. "Culture moves forward, but it will never be completed; in new regions new capacities develop; the old capacities of the old regions disappear irretrievably." [7] The continuity of history is thus broken, but in its place Herder places nations and what amounts to national souls each with its own inner determined character. He was thus able to envision classical civilization not as Civilization in itself, but as simply the culture of certain peoples who lived around the Mediterranean Basin. This being so, Germans owed it no allegiance and their own peculiar civilization was as inherently noble and worthy of cultivation as any other. As the plant unfolds its inner nature, exhibiting its own characteristic growth, leaves, and flowers, so each people must be allowed to do likewise and be appreciated on its own terms. Due allowance must be made for the influence of climate, food, and material resources—we saw this in Montesquieu—but beyond their influence is the peculiar nature of each people which is the dominant source of its development.[8]

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[6] See Robert T. Clark, Jr., *Herder, His Life and Thought* (Berkeley, Calif.: University of California Press, 1955), p. 381.

Moreover there seems to be no limit to the varieties of civilization beyond the law of contradiction. What Mr. Lovejoy has called the principle of plenitude operates in Herder's thinking as it did in Leibniz. "Nature has given the whole earth to her human offspring and has allowed to spring up on it whatever might spring up according to place, time, and force. Everything which can be, is; everything which can come into being, will, if not today, then tomorrow" (*op. cit.,* Bk. XIV, ch. vi, par. 1, p. 85). But once the plant has bloomed, all is over and there will be no recurrence of the past. It is a universal law that everything will strive toward the point of its fulfillment (*op. cit.,* Bk. XIII, ch. vii, p. 148), but the fulfillment is terminal in the absolute sense. This is the explanation of the death of nations and the course of empire. It is presumably the national spirit which dies, for new human beings may continue to inhabit the regions where it flourished. But at the same time there is a common goal to all human history: humanity. Humanity is one of these key terms that appear in philosophical writings and which are seldom clearly defined. Humanity to him is the idealization of that which distinguished the human race from all other things on earth. Our nature is organized to achieve this end; our finer senses and impulses, our reason and freedom, our health, our speech, art, and religion have been given to us for this purpose. But when one asks just what will be achieved when humanity is fulfilled, the only possible answer can be the complete actualization of whatever it is that makes man man. Humanity is not, however, simply the differentia of the human species—as rational animality was held to be by Aristotle—for men can be men and yet not human in Herder's sense. It is common to mankind (*Menschheit*) in the sense that all men are potentially human. The highest form of humanity is religion and all men have had some form of religion. But that does not mean that all men have attained the highest form of humanity. The puzzle lies in the hierarchy of values which Herder fused with the cosmic hierarchy. We know that the end is good, that when attained men will be free, that each nation must develop toward it separately from external compulsions; but what the actual condition of human beings, as contrasted with that of subhuman men, would be, will be seen below. Herder was far from being a precise thinker and he seems to have been satisfied with emphasizing the inwardness of the stimulus to growth, the necessity for letting each people develop in its own way without forcing them to live up to foreign standards. And yet, along with his particularism or cultural pluralism, there was a strain of universalism as well, for when he approached the description of humanity, he could use only those adjectives which the Christian tradition had given him.

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[7] Die Nationen bluehen auf und ab; in eine abgebluehte Nation kommt keine junge, geschweige eine schoenre Bluete wieder. Die Kultur rueckt fort, sie wird aber damit nicht vollkommer; am neuen Ort werden neue Faehigkeiten entwickelt; die alten des alten Orts gingen unwiederbringlich unter." From *Ideen zur Philosophie der Geschichte der Menschheit.* The passage continues, "Waren die Roemer weiser und gluecklicher als die Griechen waren? und sind wir mehr als beide?" (Bk. XV, init., p. 205).

[8] *Op. cit.,* Bk. VII, ch. iv, p. 273.

The argument for the ultimate achievement of humanity is not that of simple dogmatic anti-primitivism. The fourth book of Herder's *Ideen zur Philosophie der Geschichte der Menschheit* is an attempt to present it as part and parcel of a universal purposive scheme. Man's organism is adapted for the realization of rational potentialities. One sees the gradual emergence of the human brain through comparative anatomy. No animal, however, below man has the power to reason. Others, such as the beaver, fabricate tools and shelters; the ape, however, has no determinate instinct; "his power of thought stands on the edge of reason, on the poor edge of mimicry. He mimics everything and thus a thousand combinations of sensory ideas must be conveyed to his brain, ideas of which no [other] beast is capable. Neither the wise elephant nor the trained dog does what he can do. *He wishes to perfect himself.* But he cannot; the door is shut. The combining of new ideas with those he already possesses and similarly the grasping of analogies is impossible for his brain." [9] What then do the anthropoids lack? It is not speech or the appropriate organs of speech. It is erect posture and more complete integration of part to whole (*ibid.*, 127). Since, and this is one of Herder's capital assumptions, Nature works outwards from within, human anatomy must be adjusted to that for which humanity exists.[10] The essential clue to animal anatomy lies in the way the head is related to the rest of the body, whether the eye can look upward, the head turn freely, whether it is above the rest of the body or a horizontal prolongation of it (*ibid.*, 128). Absurd as this may sound to biologists, it is nevertheless a principle that has guided certain forms of aesthetics in our own day, especially that form known as functionalism. When a critic of architecture says that one should build from the inside out or that form follows function, what is he saying other than what Herder said about the organic bodies? The difference, of course, is that the architect is making something to suit a definite and knowable end and is being urged not to limit that achievement by the material at his disposal or by historical forms. But the principle that the determination of a material structure will be beautiful in proportion to its suitability is inherent in Herder's law, and moreover the idea that living forms are determined by the functions which they are to perform integrates the world of life into that of artistry.[11]

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[9] *Ideen,* Bk. IV, p. 116, italics in text. I use the edition of Suphan (Berlin, 1887).

If the erect posture of man is his physical differentia from the other animals, it gives rise to other differentiae which are of psychological importance. Accompanying it goes the hand with its fingers playing freely and able to construct works of art (*op. cit.*, Bk. IV, ch. iii, p. 137). It is thanks to our hands that our artistic souls are able to gratify their desires. Apes can use stones to kill serpents, "their most severe enemies"; they can build houses and murder men. But they are not artists. We may have senses which are less acute than those of the beasts, but we have at least one sense, sight, which is finer than theirs and more suitable to the destiny of man. Moreover we are gifted with "the divine gift of speech." In speech our slumbering reason awakes, and through speech the data of all the senses are synthesized and man develops his sense of brotherhood with his kind (*ibid.*, 139). Though the animals make sounds and simple signals to one another, though birds sing and some can be taught to imitate human sounds, nevertheless they do not know what they are saying. Man takes the place of an inner impulse to reason when he teaches them to talk, but he cannot endow them with reason. Speech is the cornerstone of man's organism and soul. His reason and his culture are based on it. Ultimately it is responsible for his ability to form ideas.

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[10] Later Schopenhauer will use a similar principle to show the dependence of anatomy on the will to live, different desires producing different organs: hands, eyes, and so on.

[11] See *Ideen*, Bk. IV, p. 128 for a striking example of Herder's use of this principle.

How, then, does Herder conceive of reason?

Reason is far from being simple reasoning: the construction of consistent systems of propositions. It is not deduction, "an innate automatism" (*ibid.,* 144). It is not the contemplation of Platonic essences, remote from life in a world of eternity. It is intimately associated with our powers of action. It judges not merely truth and falsehood, but also good and evil, fortune and misfortune. It is the name for human living as a whole, perhaps better translated by "intelligence." Reason and freedom go together, and it is thus that we specially differ from the beasts who are slaves to instinct. "Man is the first creature to be liberated" (*ibid.,* 146). So free is he that he is apparently not even limited by external standards, for Herder says "The scales of good and evil, of falsity and truth depend on him; he can search, he must choose" (*ibid.*). This is so true that he might even be called "the very weights on the scales." Here is a kind of subjectivity which we have not met so far, but which we shall encounter in later German idealists. But it is not individualistic subjectivism, in accordance with which each man would make his own standards of truth and goodness. Quite the contrary, it is collective. "The cannibals of New Zealand and Fénelon, the abandoned natives of Tierra del Fuego and Newton are creatures of one and the same species" (*ibid.,* 147). Yet one wonders why such different kinds of men, whose standards of goodness and truth seem to be so different when judged by the results of applying them, should be following the same faculty of reason. The answer is that Herder is speaking not of ends but of means. Reason as a tool is alike in all men, a way of living which struggles freely to attain certain purposes, even though the purposes themselves differ.

But man also is composed of a union of the greatest physical delicacy and the greatest longevity (*ibid.,* ch. v). Instead of furs and other natural coverings, he has made clothes, and these clothes enable him to withstand any climate. He is thus freed from any fixed abode; and, where the bear must have his cold and the ape his heat, man can roam as he will. "The closer to the beasts a nation is, the more tied is it to its land and climate by the bonds of flesh and spirit" (*ibid.,* 151). And—as if to give him time to wander—Herder believes that man is also the longest lived of all animals. "Oh what maternal care and wisdom was it of the divine economy, which determined the longevity and the duration of our kind! All living creatures of earth, which have soon to fulfill themselves, grow quickly too; they mature early and are quickly at the limit of their lives. Man, as a tree of heaven planted upright, grows slowly. He remains, like the elephant, longest in his mother's womb. The years of his youth last longer, uniquely longer than those of any beast" (*ibid.,* 153). This gives him time to learn, to grow, and to enjoy life. He needs this much time to learn, to grow, and to enjoy life. He needs this much time because he has so much to learn.

Finally man is constructed for religion and humanity. Herder says (*ibid.,* ch. vi, 154), that he would like to use the word "humanity" to cover all the differentiae of man which he has so far listed: man's reason and freedom, his finer senses and impulses, his very delicate and yet strong healthiness, his covering of the earth, and his mastery of it. But all this is crowned with religion. "If the most desirable gift of man is understanding (*Verstand*), then it is the business of the understanding to observe carefully the interdependence of cause and effect and to suspect the same where he is not aware of them. Human understanding does this in all matters of fact, crafts, and arts" (*ibid.,* 161) . So we must turn our attention inward and see what is the inner cause of our outward effects. "This is the way of philosophy and the first and last philosophy has always been religion" (*ibid.,* 162). As soon as he begins to ask this question, he will see that just as he is a being more powerful than the beasts, so there must be a being more powerful than he. Man is the visible God of the beasts. He does not know the source of his inner power. But he can understand that such a source must exist and that it is God. It is interesting to note that the proof of the cardinal religious principle is made by the understanding (*Verstand*) and not by the reason (*Vernunft*).[12] That there is a nonrational source of knowledge which is superior to reason we have already seen in Pascal, and we shall see it again in Rousseau and Kant. But in both Pascal and Rousseau God's existence is proved by nonrational means. Herder in this passage seems to take the opposing method.

And yet when he comes to the question of man's hope of immortality, he turns away from the biological considerations which he has followed so far and introduces a metaphysical principle, that of the Great Chain of Being. "From the stone to the crystal, from the crystal to metals, from these to vegetables, from plants to animals, from these to men we have seen the ascending scale of the pattern of organization and with it the powers and impulses of creatures become manifold and finally are all united in the shape of man, so far as it can comprise them. In man the scale comes to an end; we know no creature above him which is organized with more complexity and artistry. He seems to be the highest in which a terrestrial organism could be fashioned" (*op. cit.,* Bk. V, ch. i, 167). In him are joined rational capacities, freedom, and humanity; and all animate creation moves toward that end. We must assume, unless this scale of being is a simple *lusus naturae,* that there accompanies it a scale of invisible power incorporated in each creature (*ibid.,* 169). Now no power—energy—can be lost, for it would be meaningless to assert such a paradox. Just as nothing can come from nothing, so nothing can turn into nothing. The body may be decomposed, but the powers of which it is an indication—a material expression—can never suffer annihilation. There are three principles in accordance with which Nature operates: (1) Powers and organs are indeed bound together internally but are not one and the same. (2) Every power works harmoniously with its organ. (3) When the husk falls away, the power remains (*ibid.,* ch. ii, 174). Now all powers go forward in continual progress and none comes to an end (*ibid.,* ch. iii, 177). Vegetables live on minerals, animals live on vegetables and other animals; man is the greatest murderer of all (*ibid.,* 178). But what dies in each case is the hull, the body; the powers of the lower orders pass into those of the higher. "The growth of a creature is nothing other than the continual effort itself of incorporating more organic powers into one's nature" (*ibid.,* 179). The secret of Nature then is the order of spiritual forces, not of bodies. Here is the hope for immortality.

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[12] It would be desirable to translate *Vernunft* by some term other than "reason," such as "intelligence" or "insight." But I have felt it more prudent to follow tradition.

Thus Herder's philosophy of history is based not on historical data in the narrow sense but rather on a complete philosophy of nature. The laws that describe the interrelations of souls and bodies, the general drift of evolution, are to be found duplicated in the relations of the national soul to the history of the nation and to the general progress of cultural history. That the soul uses the body as the instrument for the achievement of its purposes is an idea as old as Plato, if not older, and that animate evolution is determined by the needs of the various animate beings and groups of beings was put to theoretical use by Lamarck, who was born in the same year as was Herder. The end of human history must lie within the human being himself, and is not to be determined by any external causes, though sometimes impeded by and also aided by them. Montesquieu's emphasis on the effect of climate is therefore discounted by Herder though, like many other readers of Montesquieu, he attributed more importance to the principle than its author did. Similarly materialistic theories, such as that of La Mettrie, had to be rejected.

Though Herder is firm in the belief that all men form one single species, yet he also insisted that each race or nation had its own peculiar soul and therefore its own destiny. He devotes a number of books to describing the various characteristics of the various peoples of the earth. Each tries to realize its human potentialities and each must be understood in its own terms. Each manifests a movement toward reason, toward speech and art, toward freedom or self-determination, toward religion, and toward realizing its hopes of immortality. It would be easy to find in Herder propaganda for strong nationalism or for equally strong internationalism. Since each people had its own soul, which in turn had its own purposes, speech, art, and religious ideals, so Germany, which, it must be remembered, was only a geographical name in 1784, had its own soul and had every right to actualize that soul's capacities and to liberate itself from the traditional domination of Mediterranean culture and Catholicism. Just how he defines a nation is far from clear, but he does emphasize that network of interdependence which binds people together and which is found in traditions, language, political constitution, and religion. It can scarcely be doubted that a group of human beings who speak some form of, let us say, Italian; who are baptized into the Catholic Church and believe in its doctrines; who live in the Italian peninsula; and who engage in the customary occupations of the Italian peasant are more closely alike than are the individuals who live in France and live like Frenchmen. This is very vague and inevitably remains vague. Yet the unity which appears in a national culture is not entirely illusory. Herder, like most people who believe in national souls and culture and traditions, failed to recognize the internal differences between members of a given nation—differences which appear in social stratification, ways of earning one's living, naïveté or sophistication in matters of religion, degree of education, even speech. These differences lead to internal conflict, even if it is only a matter of the prestige and hence the influence which certain levels or kinds of culture exert on the others. We are more accustomed today to the complexity of the psyche, whether individual or collective, and more willing to admit the existence of ineradicable conflict as one of the major problems not only of the individual's biography but of his nation's history.

Like Vico, Herder thought of history as what he would have called spiritual history. Though the goal of humanity includes terrestrial domination, it is not the domination of one nation over all the others,[13] but the domination of the human race over all the other animals and plants. That is involved in self-determination. When he points out that the people that is more closely tied to its land is the people closest to the beasts, he is not encouraging imperialism but cosmopolitanism. The environment is one of those things which the human spirit must conquer if it wishes ever to be free. He sees man as attempting to liberate his spirit from those very factors which others had maintained were its determinants. His distinction between *Vernunft* and *Verstand* and his appraisal of the former at the expense of the latter were, to be sure, an element in the growing anti-intellectualism of his time; but it was a useful challenge to those philosophers, like Voltaire, who had too narrow a conception of the function of reason. But here again he fell into a kind of vagueness which may have been unavoidable but was not for that reason any the less regrettable. One would imagine it to be the task of the philosopher to seek greater and greater clarity, rather than to pass on to others concepts which needed analysis. Yet the idea of *Vernunft,* though somewhat clarified by Kant, was left vague, and its overtones of mystery, which we have already seen in *le coeur* of Pascal and which were to reappear in Rousseau, failed to detract from its charm. The mystery could have been cleared up, had anyone desired to do so, by looking for those psychological causes which might determine our choice of premises, the direction of our deductions, the selection of our basic metaphors, our evaluation of problems. It may very well be true that ethical, aesthetic, and religious preoccupations, economic interests and emotional blocks perform these and analogous functions. But it is not enough to say so without any more ado and consider the problem solved.[14] One sooner or later must face the problem of when and how and to what extent and under what conditions the course of thinking is so oriented.

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[13] *Op. cit.*, Bk. VIII, ch. iv, p. 322.

3. Condorcet

The third of our philosophers of history, Condorcet (1743–94), approaches his subject in a manner quite different from either Vico's or Herder's. His attitude is that of the group of *philosophes* to whom the reason meant reasoning and for whom mystery had no charms. Written while he was awaiting execution, the *Sketch of an Historical Picture of the Progress of the Human Mind* was published posthumously in 1795.[15] It was a work which by the very nature of the circumstances under which it was written could not be heavily documented. But Condorcet had lived a life in the public service, had acquired a stock of knowledge which he had absorbed into his habitual ways of thinking, and was able to draw on his memory for what facts he needed. In common with Vico and Herder, he believes in ages, although his ages are ten in number instead of three, and the movement forward from age to age depends not on an inevitable propulsion, but upon human reason and technological ingenuity. It is the human mind which progresses, and by "mind" he means rational knowledge. But he also, in common with his fellows in Italy and Germany, makes an analogy between the development of the individual and that of the group, but the group has no collective mind of its own. It is simply a number of individuals united socially (*ibid.,* 3). Whatever community of thought there is in a society or an age is a statistical community, or, as one might say today, the modal ways of thinking.

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[14] That Herder fails to see the problem appears in such a sentence as the following, which is only one out of many: Die Vernunft ist ein Aggregat von Bemerkungen und Uebungen unsrer Seele; eine Summe der Erziehung unsres Geschlechts, die, nach gegebnen fremden Vorbildern, der Erzogne zuletzt als ein fremder Kuenstler an sich vollendet. (*Op. cit.,* Bk. IX, ch. i, p. 345.)

[15] *Esquisse d'un Tableau historique des progrès de l'esprit humain,* l'An III de la République, une et indivisible. I quote from this edition.

Though Condorcet knew that the guillotine was waiting for his head, that this was the reward given to one of the most meritorious servants of the Republic in the age of enlightenment, no personal bitterness led him either to denounce the injustice of what he was suffering or to look forward to either further tyranny or degradation. On the contrary, he no sooner is launched upon his sketch than he announces a radical faith in increasing amelioration of the human lot. The outcome of his book, he says (*ibid.,* 4), "will be to show by reasoning and by fact, that no limit has been set to the perfecting of human faculties; that the perfectibility of man is really endless; that the progress of this perfectibility, from now on independent of all powers which might wish to stop it, has no termination other than the duration of the globe on which nature has set us. Probably this progress will proceed more or less rapidly, but it will never reverse its course, at least so long as the earth fills the same place in the cosmic system and the general laws of this system do not produce on this globe either a general upset or changes which make it impossible for the human race to preserve, to exhibit the same faculties upon it, and to find the same resources there."

In general, the social scene shows a drama in which there is always a struggle between the powerful: kings and priests who hold authority in their hands; and the weak: individuals. This struggle is unequal so long as the weak are prevented from acquiring knowledge, which itself, on the Baconian principle, is power. But since all men strive for enlightenment, the only sure hope of progress lies in the spread of education. *Les lumières,* knowledge, are the instruments of each man's perfectibility, and hence those who desire progress should do all in their power to further the extension of knowledge. But again knowledge is not intuition, insight, sympathy, the heart, or feeling; it is positive calculable science, the kind of knowledge which the *Encyclopedia* was attempting to popularize. It has two tools: experimental observation and calculation. But since Condorcet was a sensationalist in epistemology, he believed that observation should be helped by the analysis of ideas into those sensations from which they arose. It was beginning to be assumed by all members of this school that, if a composite idea could be found whose elements were not discoverable in sensory experience, it was a worthless phantom that ought to be discarded. Unfortunately, once a set of ideas has been accepted by men of any period, it is retained without examination or analysis. Thus there arise what Condorcet calls prejudices, but which might as well be called obsolete ideas, which linger on from one age into another.[16] The task of the educated man is to rid society of the influence of these obsolete ideas. That Condorcet recognized the inertia of intellectual tradition is something which should be emphasized. Not only did he put his finger on a point of importance that is too often neglected, but he also illuminated one of the tenets of sensationalism which few seem to have recognized. From the Platonic or Aristotelian point of view, which was taken over by Scholasticism, knowledge cannot become obsolete. Ideas were by their very being supposed to be eternally true, inhabitants of a timeless world. How then could they ever become outdated? But if all ideas arise out of experience, then they will inevitably be conditioned and limited by the experience that gives rise to them. Such experience is always local and dated; conclusions drawn from it must necessarily be subject to correction, unless by happy chance—and it could be only by chance—one happened to hit upon a lasting truth; if the grounds for experience change, it might be expected that one's experience would also change and, if that occurred, then one's ideas would change too. The ideas of a man living on a seacoast in a mild climate insofar as they referred, let us say, to meteorology, would obviously be different from those of a man living on a mountain in Switzerland. And similarly those of a man living in a pastoral civilization would be different from those of a man who was a hunter; they would differ not only about the familiar objects of daily living: the animals, plants, the weather, but also about such matters as proper behavior, the more important virtues and vices, and possibly even the gods. If this reasoning is correct, then ideas can become obsolete when that to which they are relevant no longer exists, or is passing away, or is overlaid with new conditions. Condorcet seems at least to have seen this possibility dimly and to have understood not only the existence of obsolete ideas but their influence on society.

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[16] Note the similarity to the role played by Bacon's Idols.

The matter becomes of significance in his own meditations since he believes that all knowledge begins with the satisfaction of needs. These needs may be practical, such as deciding what to do about a surplus of property, or they may arise out of simple curiosity. Thus (*ibid.,* 6) property first was limited to the possession of animals killed in the hunt and to the weapons used to kill them, along with household utensils. When a chief died, his property "naturally" was transferred to his family. Some of them own a superfluity capable of being preserved. If it is absolute, it creates new needs. If it is limited to one thing, while its owner needs others, the idea of barter arises. From that moment ethical relations become complicated and multiplied. Greater security and leisure induce meditation or at least "continued observation." Some individuals gave a part of their surplus for labor. Immediately there is created a class of men who have free time and "whose desires extend beyond their simple needs." Industry arises, the arts already known are extended and perfected, observations which "are presented to men by chance" make new arts blossom, the population increases as the means of living become more accessible, agriculture replaces other ways of providing food, and so it goes. Each change in the composition of society creates new needs which create new problems which create new needs (*ibid.,* 6). Society moves by the increase of knowledge, but knowledge does not increase automatically. Sometimes men progress, sometimes they retrogress. Retrogression, as we have said above, arises from prejudice. Prejudice may be of various sorts, "according to the degree of education of the various classes of men, as well as according to their professions. If the prejudices of philosophers impede the new progress of truth, those of the less educated classes retard the propagation of the truths already acquired. Those of certain professions which have prestige (*accréditées*) or power present other obstacles. These are the three kinds of enemy which reason must combat unceasingly, and over which it usually cannot triumph unless it engages in a long and painful struggle" (*ibid.,* 17). We cannot guide ourselves by the lessons of the past unless the past is repeated.

With this as his introduction Condorcet begins his description of the progress of the human mind from the first organization of men into hordes (*peuplades*) to the foundation of the French Republic. The divisions, when they concern historical times, are traditional and need not take up our space. But there are certain details of the dynamic process which may be of interest. Thus the first societies by their very union of several families created problems of industry, of food supply, and even of science. The fact that several families were living in close intimacy gave rise to a sense of common interest, for it was not long before they saw the necessity for protection against enemies and for co-operation in the chase, and thus they began to have feelings for justice and mutual affection which were later transformed into an attachment to the society itself. What Condorcet really meant was that he himself saw these needs and therefore that primitive men must have seen them. The war of all against all, which Hobbes with less affection for humanity had posited, did not occur to Condorcet, even though he had seen the Terror. The need for a chief "in order to act in common, either for self-defence or to procure a more certain and abundant subsistence," gave men their first idea of authority. And at this point Condorcet introduces a new element into his philosophy, the contribution of the genius. Language was the invention of society as a whole, the bow was that of a genius. But if it took a genius to invent so useful an instrument, the existence of a need is not itself sufficient to produce its satisfaction. It may well be true that some men are favored by nature to produce new combinations of ideas through meditation (*ibid.,* 25), but if all ideas arise through the desire to satisfy our needs, then the genius, unless he had more acute needs than his fellows, would have no reason to exist. The determination of a need is usually made after the event; the historian, looking back on the history of an invention, may well declare that it arose out of the desire to fill a certain lack in society or in the life of an individual. But of two individuals, or for that matter two societies, one may feel a need which is common to both, and the other not. The need for good bowmen was as strong in France as in England, but the English and not the French developed the long bow. The need for printing was just as great before the fifteenth century as after. The need for a zero in the number system was as great in Rome as it was in the East, but the zero was not introduced into the West until sometime during the Middle Ages. It is, one suspects, the feeling of the need rather than the existence of the need which is the stimulus to invention, and the presence or absence of that feeling is not explained by Condorcet. A final peculiarity of this primitive period is the rise of a special social class in whose hands is kept all scientific knowledge. This class, "depositaries of the principles of the sciences or of artistry, of the mysteries and ceremonies of religion, of the practices of superstition, often even of the secrets of legislation and of politics," are the priests.

They are the teachers, their fellows are the pupils. They constitute organized authority and, though these words are not Condorcet's, it is they who preserve the obsolete ideas of the past and invest them with sanctity. It would not have been necessary to single out a special class of men to perform this role; the general run of human beings are only too ready to regard tradition as self-substantiated.

The second period of human history is called the Pastoral. The Pastoral Period arose because of the ease with which animals taken in the chase could be domesticated, because the land about the huts provided sufficient pasturage to nourish them, because the families had a surplus of meat, and could expect that bad seasons might produce famine. Hunting became unnecessary and was retained as a sport. And since the pastoral life is more sedentary than the life of hunters, men had more leisure and they "sought new sensations in the means of taking care of it" (*ibid.,* 31). Slavery, then, was introduced through putting prisoners of war to work and hospitality became one of the cardinal virtues. Social stratification began with the recognition of the superiority of men of experience, and men in the upper strata became the first judges. "But at the same time the art of deceiving men in order to rob them became perfected, as that of controlling their opinions by authority founded on chimerical hopes and fears. There were established cults with more fixed rules, systems of belief less grossly organized. The ideas of supernatural powers were somewhat refined and alongside these opinions there appeared the establishment here of prince-pontiffs, there of priestly families or tribes, but at all times a class of individuals assuming insolent prerogatives, separating themselves off from men in order to make them more subservient, and seeking to take exclusively to themselves medicine and astronomy so as to unite in their own hands the subjugation of minds and to leave no means of unmasking their hypocrisy and breaking its chains" (*ibid.,* 35). In passages such as this Condorcet utilizes his individualism to argue that in no society will all men be alike. Intellectually they might be expected to differ as their experiences differ. But if a special class, the priesthood, was able so to dominate the minds of their fellows, one might conclude reasonably enough that they felt the need to dominate while their inferior felt the need to be dominated. As long as no one rebelled, one might think that all were satisfied with what they had. One might also think that the separation of classes was itself a product of the ways of living. But Condorcet forgets his cardinal assumptions here and introduces a new element: the desire to retain power. We have now the following principles of historical change, either overtly stated or implied: (1) changes in practical needs,

(2) curiosity about ideas and sensations, (3) the influence of geniuses, (4) the desire to retain power, (5) the retention of obsolete ideas in the form of prejudices.

During the Pastoral Period men became attached to the soil and a division of labor had to be introduced. Some had to work the ground, others to make the instruments of agriculture, others to herd the animals. Soon five social classes developed: the landed proprietors, their servants, their slaves, laborers who owned no land, and merchants. It was in this period that writing was invented, beginning with hieroglyphics—as Vico and Herder also maintained. But here, too, the priestly class distinguished between two kinds of learning, one for themselves, the other for the people, the former expressed in the more ancient forms of language, the latter in demotic speech.

> The priests in their meditations had almost universally created for themselves the metaphysical system of a great whole, immense, eternal, of which all beings were but the parts, of which all the changes observed in the universe were but diverse modifications . . . But their language and their monuments while expressing to them these metaphysical principles, these natural truths, presented to the eyes of the people a system of the most extravagant mythology, and became the foundation of the most absurd beliefs, the most insane cults, the most shameless and the most barbarous practices. Such is the origin of almost all the known religions (*ibid.,* 68).

Science at this time was entirely practical. There were a few moral and social maxims. Astronomy was as good as it could be without glasses. But until writing was developed no further progress could be made. In the fourth period, which runs from Greece to the time of the division of the sciences, about the time of Alexander, the Greeks, disgusted with kings, overthrew them, and in their overthrow they made it possible for all men to satisfy their curiosity individually. Every man had an equal right to know the truth and to communicate it. It was this, "even more than political liberty" (*ibid.,* 77), which made the human mind independent and guaranteed the rapid extension of intellectual progress. But the Greek scientists became lost in too wide a speculation. "They wanted to penetrate into the nature of men and gods, the origin of the world and of the human race. They tried to reduce nature to a single principle and the phenomena of nature to a single law. They tried to enclose in one rule of conduct all the duties of ethics and the secret of true happiness" (*ibid.).* For that reason, instead of discovering truths, they forged systems, neglected observation, and, having no facts to guide them, engaged in subtle arguments as proofs of their speculations. Amid this nebulous mass of hypothetical and sophistical dreaming two figures shone out, that of Democritus, whose materialism "reappeared in more enlightened centuries," and that of Pythagoras, according to whom all phenomena were submissive to general law. Otherwise, Greek science was lost in verbal subtleties. But the priests nevertheless attacked it and accused the philosophers of impiety to the gods with the result that the philosophers themselves developed two kinds of doctrine, an esoteric for themselves and an exoteric for the public.[17] By keeping out of politics and by retaining their complete freedom of opinion, the Greek philosophers were able to have a profound influence on the manners, laws, and government of their people. Their great weakness, especially in political philosophy, was to confuse men as they found them with natural men, and thus to base legislation upon men "corrupted by prejudices, by the interests of factitious passions, and by social habits" (*ibid.*, 97). But although this was so, the Greeks nevertheless had a sense of their individual rights, whereas their Oriental forebears considered government as the protection of the rights of the prince. Their vices were remainders of more ancient times, their virtues their own contribution to progress. This passage was obviously a slap at Rousseau with his thesis that the progress of the arts and sciences was a detriment rather than a benefit to man.

From the time of the division of the sciences to their decadence forms the fifth period. Aristotle, who introduced it, was the first to universalize scientific method. He applied it not only to those disciplines which are habitually called science, but also to the arts. He was the first to see that intelligence could be applied to all fields of knowledge. He also separated the sciences from one another, and thus mathematics and physics were set up as separate fields apart from philosophy. Since the mathematician and physicist could retire into their studies and maintain their independence from the priesthood, they could develop calculation and observation. The other sciences also found a start in the works of Aristotle, but unfortunately their practitioners lacked the experimental method and the technique of analysis. But to Aristotle is due the primary law of epistemology: that "our ideas, even the most abstract, the most purely intellectual, so to speak, owe their origin to sensations" (*ibid.*, 114). But the conquest of the civilized world by the Romans put an end to all that and, by attempting to amalgamate different peoples with conflicting ideas into a single nation, forced them to give all their attention and intelligence to the formation of law. They were entirely given over to practical matters, as indeed they had to be, and hence had no time for anything else. Had Condorcet forgotten at this point that all knowledge arises from practice? He argues as if the exclusive attention given by Rome to government, engineering, and problems involved in them, was the cause of the breakdown of ancient civilization and the subsequent triumph of Christianity. "The spirit of the new sect agreed better with a time of decadence and ill fortune. Its chiefs, in spite of their tricks and vices, were enthusiasts ready to perish for their doctrine. The religious zeal of the philosophers and upper classes was but devotion to a political system, and every religion which allows itself to be defended as a belief that it is useful to leave to the people, cannot hope to be more than a more or less prolonged death struggle" (*ibid.*, 134). (It is unnecessary to do more than point out that the utility of religion to government was one of the most frequent arguments in its favor under the Old Regime.) The triumph of Christianity then was the signal for the complete degeneration of both science and philosophy. Its triumph was helped by the lack of printing, which permitted only the rich to gain knowledge. It was a triumph which ushered in the Dark Ages. Only Gibbon equaled Condorcet in his antipathy for the early Church and the Middle Ages. This antipathy on Condorcet's part, if not on Gibbon's, must have been due to his ignorance of the technological inventions of that period and to his knowing nothing about it except the predominance of the Church and the rise of Scholastic philosophy. It should not be denied even by those who speak most enthusiastically of "the greatest of centuries," that Plato, Aristotle, and Plotinus need not yield to St. Thomas Aquinas or St. Bonaventura in either dialectical skill or metaphysical imagination, that the sculpture of ancient times was as beautiful as that of the Middle Ages, and that even the most eminent Christian philosophers repeated uncritically stories from Pliny and Aelian as well-founded scientific fact, that a comparison between Vergil and Prudentius would scarcely redound to the credit of the latter, and that the persistent use of Martianus Capella as a textbook, or even of the various works of Boethius, did not exhibit much rational insight. But at the same time, if one were interested in practical matters—the satisfaction of vital needs—the Middle Ages were far in advance of antiquity. One may praise or condemn periods, if one likes that sort of self-indulgence, but if one thinks that progress is based on technological advances, then it is strange to rank the Middle Ages below any preceding time.

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[17] This strange idea has a long history. I have tried to show what little evidence there is for it in "Ancient Testimony to Secret Doctrines," *The Philosophical Review,* Vol. LXII, No. 1 (January, 1951).

The opening of Condorcet's discussion of this epoch of decadence, as he calls it, is typical of the opinions of those who so hated the Church that they were incapable of appreciating its real benefactions.

> In this disastrous epoch we shall see the human mind rapidly fall from the heights to which it had been raised and ignorance drag behind it here ferocity, there a refinement of cruelty, in all places corruption and perfidy. Scarcely a few lightning flashes of talent, a few flashes of magnanimity or goodness, could pierce that nocturnal darkness. Theological daydreams, superstitious impostures, are the sole marks of human genius, religious intolerance their sole ethics; and Europe crushed between sacerdotal tyranny and military despotism, awaits in blood and tears the moment when new enlightenment shall permit it to be born again in liberty, humanity, and virtue (*ibid.,* 144).

Such a preamble will scarcely reassure the modern reader whose knowledge of this period of darkness is more detailed than Condorcet's. But it should be remembered that his own contemporaries had been hounded by the Sorbonne into anonymity, had been imprisoned for their opinions, and had little reason to think kindly of an institution organized to encourage the love of God and one's neighbor. The memory of Alexander VI and the Medici Popes, of the government of the Papal States and the Inquisition, was more lively in eighteenth-century France than it has been since the time of Leo XIII. This does not make Condorcet's opinion more valid, but it makes it more excusable. He is willing, however, to credit the Church with the condemnation of slavery. He sees the beneficent effects of the preaching of brotherly love. He recognizes that the Church's insistence on her independence from secular authority was a deterrent to despotism. But he believes that her own despotism was equally abhorrent in that it encouraged superstition and discouraged intellectual freedom. He admits that Christianity preached an ethics based on universal principles which no sect had ever denied, but it also created a host of purely religious duties and imaginary sins and thus departed from natural virtue. The only ray of light of which he is willing to grant the existence is the civilization of the Arabs, which "cultivated astronomy, optics, all parts of medicine, and enriched these sciences with some new truths" (*ibid.,* 162).

Thanks to the intolerance of the priesthood, the viciousness of their private lives, their revolting hypocrisy, rebellion set in. Men began to see the inconsistencies of dogma and traditional maxims, the contradictions between Christian preaching and practice, and it was not long before the rebels were successful. Free thought manifested itself in political circles in Frederick II; in literary, with Boccaccio, in military, with the Crusades. People began to have some knowledge of ideas other than those which the Church had been willing to grant them. Free cities and city-states arose. In England Magna Carta set the example of a declaration of rights which the continental communes were to copy. These charters "were the origin of those declarations of rights regarded nowadays by all enlightened men as the basis of liberty, and of which the Ancients had no conception, could not have any idea, because domestic slavery had sullied their constitutions; because in their case the right of citizenship had been hereditary, or conferred by voluntary adoption; and because they had not been reared in the knowledge of those rights inherent in the human race and belonging to all men with complete equality" (*ibid.,* 175). Thanks to Europe's increasing knowledge of Asia, mechanical arts had begun to be known; silk culture, windmills, papermaking, chronology, the compass, gunpowder, armor, all aided the progress of civilization. In Italy there was a revival of letters in Dante and Boccaccio. But all this was but germinal and happier times had to be awaited before the germs could grow. When printing was invented, bit by bit freedom of thought could spread, for knowledge could be had more cheaply in printed books than in manuscripts. This technological invention, then, is to be credited with the introduction of enlightenment, for it was no longer possible to control the spread of ideas. Then came Luther and the Reformation, and the absolute tyranny of the Church was broken. Unfortunately princes took over the power which Popes had exercised, and a new tyranny was established. All authority ranged itself against freedom of thought. But since princes had allied themselves with the various Protestant sects, they were forced to admit a certain freedom of thought, at least freedom to depart from the traditional thoughts of the Papacy. Only Christians enjoyed this and Condorcet has no illusions about the bigotry and intolerance of the new masters of men. But this very intolerance was a stimulus to rebellion and it was not too long before "this great truth" was pronounced, "that freedom is an inalienable good" (*ibid.,* 208). "Popular movements, the revolutions which had stirred up Italy, England, and France, were to attract the attention of philosophers to that part of politics which consists of observing and predicting the effects which constitutions, laws, political institutions can have on the freedom of peoples, on prosperity, on the power of states, on the preservation of the independence, and on the form of their government" (*ibid.,* 210). Copernicus and Galileo, Bacon and Descartes were the founders of the new science. Whenever science touched upon political matters, those in authority attempted to suppress it, but where its contact was less evident, it retained its freedom and was permitted to advance. Bacon's contribution was the revelation of the true method of discovery: observation, experimentation, and calculation. But he lacked scientific knowledge at first hand. Galileo freed science from superstition, prejudice, and authority, utilizing the experimental and mathematical method to prove his points. But he restricted his investigations to mathematics and physics. It was left to Descartes to universalize a method which could be applied either to the physical or the moral sciences. "If in physical science his procedure is less secure than that of Galileo, if his philosophy is less wise than that of Bacon, if he can be reproached for having learned too little from the lessons of the one and the example of the other: to be suspicious of his imagination, to put only experimental questions to nature, to believe in nothing but calculation, to observe the universe instead of constructing it, to study man instead of making guesses about him; yet the very audacity of his errors served the progress of the human mind. He stimulated minds which the wisdom of his rivals had not been able to awaken. He told men to shake off the yoke of authority, to recognize only the authority admitted by reason" (*ibid.,* 231).

After this period came the one between Descartes and the French Revolution. Nation after nation, the Dutch provinces and then England, freed themselves from both political and sacerdotal tyranny, and the epoch of human freedom was ushered in. Its birth was painful and slow, but finally (*ibid.,* 240) it became clear that man "is a sensible being, capable of reasoning and of acquiring moral ideas." That is his nature, and states are formed to guarantee the exercise and expression of that nature. There was no social contract, for a contract can preserve only those rights one wants at the date of its completion. Following Locke, French philosophers such as Bayle, Fontenelle, Voltaire, Montesquieu, and their disciples fought for the truth. To them are due our freedom from despots in both the state and the church, the recognition of the independence of reason, freedom of speech and the press. Their war cry was Reason, Tolerance, and Humanity (*ibid.,* 259). As a final result of their doctrines the French revolted, and their revolution "embraced the entire economy of society, changed all social relations, and penetrated to the last links in the political chain" (*ibid.*, 276). All this was attributable to the extension of rational science, which in turn could never have been realized without freedom of thought. Condorcet briefly traces at this point the progress of the various scientific disciplines, and it is especially noteworthy that he spends several pages on the benefits that the statistical method and the calculus of probabilities were to confer on scientific method. It is not yet time, however, to proclaim a complete victory over superstition and tyranny. "We still see that enlightenment is to be found in only a small part of the globe, that the number of those who enjoy it disappears before the great mass of men given over to prejudice and ignorance. We see vast areas groaning under slavery, and showing us only nations here degraded by the vices of a civilization whose corruption slows up progress, there vegetating still in the infancy of the first historical periods. We see that the work of these last ages has done much for the progress of the mind of man, but little for the perfection of the human race itself; much for man's glory, something for his freedom, almost nothing for his happiness. At some points we are dazzled by a blinding light; but thick shadows still cover an immense horizon. The philosopher's soul rests in consolation when it surveys a small number of objects; but the spectacle of stupidity, of slavery, of wild fantasies [*extravagance*], of barbarism afflict it much more often; and the friend of humanity can take no unmixed pleasure except in abandoning himself to the sweet hopes of the future" (*ibid.*, 321).

These sweet hopes were expressed in the final chapter of his pathetic little book. They rest upon the following three propositions: (1) the destruction of inequality among nations; (2) the progress of equality in each people; (3) the real perfection of man. All nations in time will reach the same point of civilization, for it cannot be believed that nature has condemned one people to ignorance and barbarism and another to enlightenment. Within each nation education will be made more common, and the intellectual and moral inequalities of their members will inevitably diminish. And finally the very increase in knowledge will lead to the perfection of the race—Condorcet seems to believe that men will always use their knowledge in the best fashion. We of the middle twentieth century are apparently living in a time of disillusion and downright despair. This book is being written ten years after the close of a horrible war entailing destruction and inhumanity on a scale that not even savages ever knew. The conscience of nations seems incapable of being awakened by the stimulus of right and wrong. It has been called the Age of Anxiety by one of our leading poets. And yet amid all the nightmares created by our contemporaries one cannot fail to see the reasonableness of Condorcet's hopes. The epoch of colonialism would appear to be drawing to a close and the accessibility of knowledge is certainly greater than ever before. There are, to be sure, in many of the most advanced nations a nostalgia for authority and an intolerance of criticism. But there is a strong countermovement which cannot be denied and whose effects are evident. It is clear that we have nothing to hope for from either religious or political organizations. That experiment has been tried and has notoriously failed. Condorcet was undeniably right in asserting that the perfection of the individual was the sole hope for the perfection of the group and he was also right in maintaining that this would never be realized automatically.

An intellectualistic philosophy of history, such as Condorcet's, may not seem like much more than an outline of intellectual progress. He propounds no sweeping laws; he sees no inevitability in the succession of ages. He recognizes degradation as well as amelioration. He is fully aware of the necessity of correlating material and intellectual welfare. He fails to be consistent here and there. But his fundamental thesis, that man must rely on his reason if he is ever to improve his lot, would seem acceptable to all. For even those men who would believe that supernatural forces govern our lives have to admit that this side of heaven we can rely only on our intelligence. And those who, on the contrary, envision men as gaping mouths demanding food above all will also have to admit that no mouth can feed itself. There is much in the historical portions of this work which is absurd. But unless one thinks that historical change is beyond men's control, to what other instrument of change can one appeal than the human reason?

CHAPTER 11

Rousseau and Anti-intellectualism

Diderot's *Encyclopedia,* the organ for propagating faith in rationalism, began to appear in 1751. It tried by spreading information about both science and the arts to create the new man, a man free from superstition and the influence of organized ecclesiastical authority, and it may be thought of as the first step in accomplishing the program which Condorcet believed to be the one hope for the future. Though none of the *philosophes* seemed aware of the peculiar epistemological problems involved in their attitude, and in fact did not have a satisfactorily clear notion of what they meant by such terms as "reason," "sensation," "experience," they proclaimed themselves rationalists and maintained that all knowledge arose out of sensory perceptions. The technical construction of their theory of knowledge was to be found in Condillac, who will be treated in a separate chapter below; their propaganda has already been discussed.

1. Rousseau, the First *Discourse*

In 1750 there was published a tract that may be said to have fired the first shot in the battle against rationalism. This was the famous *Discourse* of Jean-Jacques Rousseau (1712–78) on the influence of the sciences and the arts upon morals.[1] The Academy of Dijon had proposed the question of whether the renewal of the arts and sciences had purified morals, and Rousseau decided to answer it in the negative. Whether this was due to a malicious suggestion of Diderot, as has sometimes been maintained, or whether it was the result of a blinding illumination so forceful that Rousseau found his jacket wet with streaming tears, is no longer of importance. His discourse was quite in keeping with his paradoxical thinking and no more startling in its originality than many of his other writings.[2] It is, however, likely that most Frenchmen if asked the question would have maintained that the arts and sciences had not only been a purifying influence upon morals but, with the exception of religion, the unique good influence. Rousseau was well aware of the shock which he was preparing to deliver and of the profound difference between his ideas on the subject and those of *les philosophes.* Almost his opening words are a defiance of regnant opinion. "I foresee," he says (*ibid.,* 93), "that I shall with difficulty be pardoned for the side which I have dared to take. Making a frontal attack on everything which stirs the wonder of men today, I can expect nothing but universal blame, . . . [But] I am worried about pleasing neither the intellectuals (*les Beaux-Esprits*) nor those in the public eye. There will always be men so constituted as to be conquered by the opinions of their time, of their country, of their society . . . There is no need at all to write for such readers when one's wish is to live for posterity." But by one of the ironies of history his little work did please the intellectuals and the *gens à la mode;* it acquired for him a celebrity which he had not known before, and it was the source of one current of opinion, not only in France, but elsewhere, which in slightly different form is running strongly today. (I refer to our contemporary tirades against science.) Regardless of that, Rousseau later felt somewhat differently about the work. In a note prefixed to a later edition issued about fifteen years after the publication of the first edition, he says, "It is certain that this piece, which won me a prize, and made my name, is at best mediocre. . . . What an abyss of misery would have been avoided if this first work had been received as it deserved!" (*Ibid.,* 92.) Impatient of criticism, even when counterbalanced by praise, he felt that his paradox had brought him only sorrow. This did not, however, prevent his publishing other and equally strong paradoxes later on.

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[1] *Si le rétablissement des Sciences et des Arts a contribué à épurer les moeurs.*

The *Discourse* itself begins with a Socratic apology: he is a man who knows nothing and is not ashamed of his ignorance. He paints a vivid picture of the stupidity and barbarism into which the world had sunk in the Dark Ages and recognizes the contributions to enlightenment made by the Renaissance. But there is a gloomy side to the picture too. "The spirit has its needs as well as the body. The latter are the foundation of society, the former its pleasure. While government and laws provide for the security and well-being of men living in communities, the sciences, letters, and arts, less despotic and perhaps more powerful, wind garlands of flowers about the iron chains with which they are laden, stifle their feeling for that primordial freedom for which they seem to have been born, make them love their slavery and create from it what are called civilized peoples. Need established thrones; the sciences and the arts fortified them" (*ibid.*, 101). The note is already struck that proclaims the original freedom of man to be not only lost but not regretted; and if its loss is not regretted, it is because of the influence of the arts and sciences. *Les peuples policés* are gentle and urbane; association with them is easy and affective; they have all the air of virtue without possessing it.

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[2] The matter is soberly and, I think, very satisfactorily settled in Morley's *Rousseau,* Volume I, p. 133. Cf. C. W. Hendel, *Jean-Jacques Rousseau, Moralist,* Volume I, p. 25, which is one of the best studies of Rousseau in English which I have found. Quotations from the *Discourse* are from the edition of George R. Havens, published by the Modern Language Association (1946).

The French, he continues (*ibid.*, 104) are a charming people. They are cultivated, easygoing, without pedantry or buffoonery. But all this is superficial and from it nothing can be deduced of the inner life of these men and women. The "man of health and strength" is known otherwise: he will be found beneath the costume of the ploughman and not under the gilt lace of the courtier. He is the athlete who fights in nakedness. He needs no ornaments to conceal the deformity of his body for he has no deformity. Before we became polished by the arts, we were rustic but natural. Such men were no better than we by nature, but they understood each other and were not concealed from each other's sight. We have become standardized; we follow the rules of etiquette, not our individual insight. We are afraid to appear as we are. Hypocrisy is the ruling manner; sincerity has abandoned us. Scepticism is the ruling philosophy. And all this is to be attributed to letters, science, and the arts. But should some person come from a distant land and observe us, he would conclude that our morals were precisely the contrary of what they are. Our depravity and corruption have advanced as the sciences and arts have progressed, and, what is more, this has been true of all peoples. Egypt, Greece, Rome, Constantinople, and today China all offer the spectacle of this disastrous series of events. Their people all begin in wisdom and simplicity; they end, thanks to their sciences and arts, in depravity and slavery. On the contrary, the Persians, the Scythians, the Germans, and the Romans "in the days of their poverty and ignorance" were saved from this degeneration.[3] One has only to contrast the happy ignorance and the legal wisdom of the Spartans with the polished and cultivated Athenians to see how much more preferable was the life of the former than that of the latter. One man, Socrates, saw this and spoke a eulogy of ignorance. Cato in Rome continued the battle against the corruption of knowledge. Had Socrates been living in our time, he would have felt the same and though he would not have drunk the hemlock, "he would have drunk a cup much more bitter than that, insulting banter and disdain a hundred times worse than death" (*ibid.,* 125). Nature wished to preserve us from science; the secrets which she conceals from us are so many evils from which she protects us, and the trouble involved in learning is not the least of her benefits. Men would be even worse than they are, were they born learned (*ibid.,* 126).

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[3] On the simplicity and morality of the Persians, see Havens' commentary, p. 195, n. 126; for the Scythians, see A. O. Lovejoy and George Boas, *Primitivism and Related Ideas in Antiquity* (Baltimore: Johns Hopkins Press), p. 315.

Thus the principle seems to be adumbrated that man in a state of nature is virtuous, and needs neither science nor art to live morally. Though these are not the words of Rousseau, he seems to be suggesting that the natural man would live by some innate power such as animal instinct and that his fall came about, as in Genesis, through eating of the fruit of the Tree of Knowledge. This interpretation is fortified by the second part of the *Discourse* in which he tries to show that all the arts and sciences arose out of vice: astronomy from superstition; eloquence from ambition, hatred, flattery, and lying; geometry from avarice, and so on. All schools of scientists dispute among themselves and we have no criterion of choice between the vain opinions. These *philosophes* are social parasites. Even if they could settle their disputes, we should not be better off. "These empty headed and futile elocutionists go about armed with their deadly paradoxes, sapping the foundation of law, annihilating virtue. They smile disdainfully at those old words, Country and Religion, and consecrate their talents and their philosophy to destroying and vilifying all that is sacred amongst men" (*ibid.,* 132). And this in a simple attempt to stand out from the crowd. But not only do the practitioners of these arts and sciences live on the industry of others; their own products are the source of social evils, the first of which is luxury, born from the idleness and vanity of men. No wonder that our philosophers talk of commerce and money whereas the ancient statesmen spoke of virtue and morality, for materialism and luxury go together. The arts, too, descend to this level of false brilliance and even Voltaire sacrificed to gallantry and delicacy. Taste is corrupted as a consequence, and the man who refuses to cater to this corrupt taste is vilified and dies in poverty and is forgotten.

In the *premiers temps,* the state of nature, things were simple. "It was a lovely river bank adorned by the hands of nature alone, toward which the eye was constantly turned and from which one departed with regret. When innocent and virtuous men liked to have the gods as witnesses of their acts, they lived with them in the same cabins, but soon becoming wicked, they wearied of these inconvenient spectators and relegated them to magnificent temples. They drove them out and settled in them themselves or at least the temples of the gods could not be distinguished from the homes of citizens. This was the height of depravity and the vices were never carried farther than when they were to be seen supported at the entrances of the palaces of the great on columns of marble and carved in Corinthian capitals" (*ibid.,* 140). Manliness disappeared, military virtues faded away, and all this was the work of the arts and sciences, which are pursued in studies indoors. But not only do they destroy military virtues, they also are deadly to intellectual qualities. We study everything but duty. Our children speak every tongue but their own. They abandon truth for sophistry. The words of magnanimity, equity, temperance, humanity, courage, are unknown to them (*ibid.,* 146). They never heard of country, and if they are spoken to of God, it is less that they may fear Him than that they may be afraid.

Harping on the theme that virtue has no reward whereas talents have all, Rousseau even goes to the point of excusing the burning of the library at Alexandria and hints that it might not be a bad idea to follow that example in his own time. For he believes printing to be one of the major sources of our troubles, in that it preserves the impious works of such men as Hobbes and Spinoza. Our posterity, should it have good sense, would pray to God to "deliver us from enlightenment and the deadly arts of our fathers and restore us to ignorance, innocence, and poverty, the sole goods which can create happiness and which have value in thine eyes" (*ibid.,* 157). Forgetful of the inherent viciousness of all learning, he proceeds to extol the greatness of Bacon, Newton, and Descartes, who achieved their masterpieces without the aid of instruction (p. 158),[4] and presumably that genius would have flowered whether they had had any schooling or not.

The *Discourse,* after an appeal to his fellow simple citizens to remain in obscurity—an obscurity from which the prize awarded to this essay removed him—ends on the following apostrophe to Virtue:

> O Virtue! Sublime science of simple souls, needs it so much pain and machinery to know thee? Thy principles are engraved in all hearts and to know thy laws requires but withdrawal into oneself

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[4] He seems also to forget that each of these men was not only highly trained, but a great reader.

> and hearkening to conscience with passion silenced. There is true Philosophy; let us learn to be satisfied with it. And without envying the glory of those famous men who are immortalized in the Republic of Letters, let us try to place between them and us that glorious distinction which once was made between two great peoples, that one knew how to speak well and the other to act well. (*Ibid.,* 162.)

Whether one reads an annotated edition of this *Discourse* or not, only a high school education is required to see that without having read the works of Plutarch, Montaigne, Bayle, Cicero, Voltaire, and numerous other contemporary historians and essayists, Rousseau could never have cited the examples from antiquity which he uncritically accepts. But to reject learning after being well read is a common feat and indeed one cannot reject what one does not already possess. There is no reasoning to speak of in this work; it is a diatribe, eloquent at times, always passionate. Rousseau as a man was paranoiac and he expressed his paranoia fully in this piece. That neither knowledge nor art can make a man morally better is probably true. It is surely a commonplace that the great scientist is no more moral than the simple ignoramus, unless his knowledge is knowledge of right and wrong. The most moving defense of the arts was written by Cicero in his *Pro Archia,* but not even he thought that they automatically improved morals. Regardless of the weaknesses of this *Discourse,* it contained in germ the following ideas which Rousseau was to expatiate upon later and which were most influential in the course of anti-intellectualism: cultural primitivism; the cognitive supremacy of instinct, or conscience, or the heart; what might be called epistemological individualism, that is, the source of truth living within each person, not in any group, or tradition; the necessity of a Socratic purgation as a prerequisite to knowledge.

2. Rousseau, the Second *Discourse*

Many of these themes were developed with greater force of argument in the second *Discourse,* the subject of which, also set by the Dijon Academy, was "What is the Origin of Inequality Amongst Men, and Is It Authorized by the Law of Nature?" This piece did not win the prize, though it is better reasoned than the first and would probably strike modern readers as a much more serious work. Rousseau begins by distinguishing between two sorts of inequality, the natural or physical, established by Nature and consisting in differences in age, health, bodily and psychic powers; and the moral or political, which comes from convention and which consists in privileges which some have at the expense of others, privileges given by wealth, honors, power. The former clearly cannot be explained. The latter demands noting first the moment at which nature was submitted to law. No one so far has been able to describe the state of nature, since all attribute to it characters borrowed from their own times. Men were removed from the state of nature by God as soon as created, but we can, after all, consider what men would be like if left to their own devices. This can be discovered only by a comparative study of human beings in various societies as we find them now. Had Rousseau been serious in this search he would have found the common elements in human nature by subtracting the cultural differences. But instead of proceeding on this path, he utilizes the savage as the type of natural man and has no trouble in pointing out that he is stronger, more self-reliant, less given to illness, more temperate than civilized man. Our bodily weakness, our dependence on others, our intemperance are all our own work, and if we lived simply, in a regular manner, and in solitude, "as Nature prescribes," these evils could be avoided. Reflection and meditation are unnatural. L'homme qui médite est un animal dépravé. "These first men, then, are in no great state of misfortune, nor do they run into such great obstacles to their self-preservation, in going naked, without houses, and deprived of all those superfluities which we believe to be so necessary. If their skin is not covered with fur, they need none in hot countries, and they soon learn in cold to take over the furs of those beasts which they have killed. If they have only two feet for running, they have two arms to provide for their defense and their needs. Their children perhaps walk late and with difficulty, but their mothers carry them easily, an advantage which other species lack, for the mother in their case being pursued is constrained to abandon her little ones or to slow up her speed to meet theirs" (*Discourse II,* 14).[5] Such a man will sleep lightly, as the animals do, will think only of self-preservation, his senses of touch and taste will be undeveloped while those of sight, hearing, and odor, very highly.

The fundamental difference between man and beast is that the latter does everything automatically or instinctively, whereas the former can choose. It is in this faculty of free choice that one sees the spirituality of his soul. Bodies always act uniformly; therefore that which acts according to circumstance or freely cannot be material. Moreover man can improve his lot. His powers of self-perfection are very great and when he loses them, as in senility or imbecility, he returns to the condition of the beast. Unhappily this very faculty, distinctively human, is also the source of our troubles, but that is because we misuse it. Rousseau here is far from praising all that savages do, for he notes the practice of head binding among the Orinoco Indians and scarcely believes that to be beneficial. The primitive understanding is limited to satisfying the impulsions of nature, and the "sole goods he knows in the universe are food, a female, and rest" (*ed. cit.,* 21); the sole evils: pain and hunger. As Condorcet said in his *Esquisse,* the progress of the mind runs alongside the needs which people feel and, consequently, the passions which move them to satisfy those needs. Thus northern peoples are more industrious than southerners, because in northern climates they must be in order to survive, "as if Nature wished thus to equalize things by giving to minds the fertility which she has refused to the land" (*ibid.,* 22). The savage has no thought for the morrow and he lives from day to day. He seems to be a mind occupied exclusively with sensations. The distance between such a mind and that of an intellectual is so great that one wonders how it was ever bridged. The discovery of fire-making, or agriculture, and other arts was so extraordinary that the savages have always attributed them to divine intervention. But of what use would abstract thinking be to savages, scattered in the forests among the beasts? Thousands of years must have been required to perfect language which was essential if thought was to have been developed. The usual account of the origin of language must be wrong, for it is usually attributed to men living together in societies. But the savage lives in solitude, has no family organization, and, as soon as the child is able to take care of himself, he goes off independently of father and mother. There was no need for speech when men lived in this fashion. Nor could language have been invented. For if words are needed for thinking, and thought is needed for invention—as it obviously is—then we are engaged in a vicious circle. Thought is required for the invention of that which is a prerequisite of thinking.[6] To Rousseau language is the result of an evolution out of instinctive ejaculations, cries of fear and joy. As men's ideas began to spread and multiply, there were established among them various refinements of these cries and various gestures, the latter for visual and mobile objects, the former for auditory. Each object had its own name, nor were there any class names. For there is no imagining a general idea; here Rousseau joins forces with Hobbes, Locke,

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[5] I use the edition of Muller and Vaillant, in the Oxford French Series (Oxford: Oxford University Press, 1922).

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[6] This argument was to be repeated by the Traditionalists Joseph de Maistre and the Vicomte de Bonald at the beginning of the next century. See below, p. 578.

Berkeley, and Hume. For these, discourse is needed. But how it developed is a mystery and Rousseau admits that he cannot solve it by natural means, *des moyens purement humains* (*ibid.,* 34). He leaves its solution to others. Nor does he do better when he attempts to explain the rise of societies. If he had stuck to his comparative method, he would not have found his solitary savage; he would have seen that all men are gregarious and that their social life therefore is not a problem. He cannot attribute the birth of societies to need, for he cannot believe that the savage, as he has painted him, needs other men.

The question next arises of whether natural man was virtuous or vicious. Could people who were living a solitary nonsocial life be good or bad, other than in the purely physical sense of being more or less adapted for survival? This question is to be suspended until he shall have proved whether civilized men have gained anything of value from their living together. Would it not, after all, be better to live in independence of our fellows, without obligation to receive everything from those who feel no obligation to give anything? Is not the savage in his freedom better off, for he cannot be bad in ignorance of the idea of the good. It is not enlightenment or the brake of law which hinders us from committing evil; it is rather the tranquillity of our passions and our ignorance of vice. The one virtue which can be attributed to men in a state of nature, and which they share with the beasts, is pity. This is anterior to all reflection. As soon as reflection arises, so does self-love. "It is philosophy which isolates a man; it is through philosophy that he says to himself when he sees a man suffering, Perish if you will; I am safe" (*ibid.,* 41). Pity then is primitive and keeps the race in safety. Pity takes the place of law and inspires the Golden Rule. Reason has nothing to do with this. Primitive man, having sluggish emotions and pity as a check, having no private property, no vanity, no regard for praise or esteem or disdain, no idea of justice, no sense of revenge, except at the moment when pain may have been done him, needed nothing more than pity.

There was, to be sure, the "terrible passion" of love, "which defies all dangers, overthrows all obstacles, and which in its madness seems fitting to destroy the human race which it was destined to preserve" (*ibid.,* 43). But this madness is born of the laws themselves which attempt to control it. Physical love is easily satisfied; moral love fixes passion upon a single object which the lover must keep for himself. But moral love arises in society and is utilized by women to maintain their power over men. It has no natural justification. The savage knows nothing of it, and "any woman is good enough for him" (*ibid.*, 45). Limited to physical love, he is ignorant of all the quarrels which are stimulated by erotic jealousy, and yields to his sexual passions as they arise. "Wandering in the forests, without industry, without speech, without home, without wars, and without social ties, without either need of his kind or desire to harm them, perhaps without ever running into another individual, savage man, subject to few passions and self-sufficient, had but the feelings and knowledge appropriate to his condition, felt but his true needs, looked only at that which he believed interesting to see, his intelligence progressing no more than his vanity. If by chance he made some discovery, he could the less communicate it as he did not even recognize his own children. Art perished with its inventor. There was neither education nor progress. The generations were multiplied uselessly. And since each person started from the same point, the centuries rolled by in all the crudity of the first ages. The race was already old and man remained a child." (*Ibid.*, 47.) This concludes the first part of the *Discourse on Inequality,* and is used to show that there was less inequality in the savage state than in the civilized. For how could inequality exist when there were fewer goods to be shared, fewer goals to be reached, fewer rewards to be distributed?

It is perhaps unnecessary to point out that Rousseau's solitary savage has never been discovered, but is just as much a figment of his imagination as Hobbes's man in a state of nature, or Locke's. He assumes that society is an invention and that men must originally have been solitary animals, an assumption which was no more necessary then than now. That man is essentially a social animal had been maintained as early as Aristotle, and the only plausible reason for Rousseau's assumption is the biblical story of the creation of Adam. But even in that it is clear that man was created either along with his mate (Gen. 1:27) or immediately before (Gen. 2:18–24). If there was one book that a Protestant from Geneva knew, it was the Bible, and the quotation "Man was not made to live alone" was far from being a secret of the schools. Rousseau's invention of the solitary savage is perhaps a reflection of his own estrangement from society or a deliberate attempt to shock his judges by another of his favorite paradoxes.

Civil society, he points out in the beginning of the second part of this *Discourse,* began when private property was instituted. Why anyone living in solitude should have tried to prevent his nonexistent neighbors from encroaching on his land remains a mystery. Rousseau realizes this and posits a considerable progress in industry and learning before this happened. Presumably the primary cause of change was the multiplication of the race and the necessity of finding suitable habitations for it. They began to live in a variety of lands, along river banks and in forests, in cold as well as warm climates, and the need for self-preservation was enough to cause them to invent ways of meeting the challenge of nature. To do this the simple sensations of their savage state did not suffice. They had to note relationships between things, to distinguish between the useful and the harmful, and to think. Man thus began to realize his superiority over the beasts and to begin his conquest of them as needed; in this way pride was born. Consciousness of other human beings was forced upon him and the natural instinct of pity developed into a spirit of co-operation. Language, fixed homes, families, and property, conjugal and paternal love followed one after another. And soon man found a way to procure satisfactions which were to become his first source of evil. Bit by bit, all the other evils of society developed: jealousy, vanity, disdain, shame, envy, injury, and vengeance, and all can be traced back to private property. But the nascent societies were most favorable to humanity, for they held a place midway between the indolence of the savage state and "the petulant activity of our self-love" (*Discourse II, ed. cit.*, 65). It was the period least subject to revolutions, the best for man, and it was only a deadly act of chance that ever changed it. It is therefore this condition, and not that of the savage, which Rousseau finds the most desirable.[7] Here is cultural primitivism, but not chronological, and even the cultural primitivism is relative. It is a simple life, of which one of the most important traits is the individual's independence of his fellows. So long as men engaged in those arts which they could practice individually, without the co-operation of their fellows, all was well. But as soon as they needed the hands of others, then inequality arose. Metallurgy and agriculture entailed the practice of other arts and the cultivation of the land entailed its subdivision. As soon as men began to work in common, the stronger did more than the weaker, the more ingenious found ways of shortening his toil, the ploughman needed more metal or the smith more wheat, and though they might all work equally hard, some had a surplus of goods and some a deficiency. In this way natural inequality joined forces with moral. Inevitably laws were made for the strong which insured their power, made property sacred and inalienable, and insured the inequality of wealth. Laws led to the establishment of governments, governments to abuses. "If we follow the evolution of inequality in its different periods, we shall find that the establishment of law and property rights was its first step; the institution of magistrates its second; and that the third and last was the change from legitimate power to arbitrary power; so that the state of rich and poor was authorized by the first epoch, that of the powerful and the weak by the second, and by the third that of master and slave, which is the last degree of inequality and the termination at which all the others arrive until new revolutions dissolve government completely or bring it back to its legitimate form" (*Discourse II, ed. cit.,* 92). Some kind of moral inequality seems to be justified: that which follows from natural or physical inequality. For no one would expect a child to govern the aged, an imbecile to lead the wise, or a handful of men to be gorged with superfluities while the starving multitude lacks necessities.

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[7] For a detailed discussion of Rousseau's primitivism, see A. O. Lovejoy's "The Supposed Primitivism of Rousseau's *Discourse on Inequality*," in *Essays in the History of Ideas*, p. 14.

The second *Discourse,* while exhibiting Rousseau's sense of justice and his horror of injustice, is no more than the first a scientific account of history. The second part could stand without the first and it is indeed hard to see why the first was needed. Much as he finds the savage condition admirable, he does not set it up as an exemplar for reformers to follow and he realizes that some inequality is inevitable if men are to live together. The best social condition is that of a simple life with handicrafts the only industry. But he seems to realize that, once men live together, their natural inequalities will bring about moral inequalities. He continues his harangues against learning and the arts in the second *Discourse* and tries to show their maleficent effects; but he does this with more reasoning than he did in his prize-winning piece. What he did not see was that if moral inequality is involved in social living and if men must live together, moral inequality may be as much of a natural law as complete freedom. It is always difficult to assign temperamental motives to a thinker, but Rousseau's emphasis on individualism seems, at least to us, no more than an expression of his own distaste for society. As a young man in Paris, he had been a great success. His social failures were due to his own inability to accept criticism or feel gratitude for the benefits conferred by his fellows. He was above both in his own opinion and yet was shocked when he received that which he claimed to disdain.

One feature of Rousseau's comments on solitude requires remark. The savage, it will be remembered, could be neither good nor bad since he was living alone. In Nietzsche, Zarathustra on his mountaintop with the eagle and the serpent is above good and evil. Did Rousseau think that a man who was able to complete his withdrawal from society would also be beyond morality? It is certain that he has very little if any regard for the traditional standards of morality. The innocence of a pure heart and pity for one's fellow suffice to constitute goodness. The former could be possessed by the solitary thinker, the latter obviously requires objects to pity. But, in many of his works, Rousseau isolates his heroes from society and has them develop their own personal standards. He was not, to be sure, a consistent thinker, but one finds it hard to resist the temptation of believing that the germ of his later ethical theories is to be found in the two *Discourses*. For not only is insight into goodness a personal matter, nourished by oneself rather than by others—though he also thinks it could be fostered by example—but presumably withdrawal from society is an essential of the search for virtue. The natural man, though again variously described, is frequently man as he would be if he were not tied by the chains of social conformity.

3. Rousseau, the *Social Contract*

Rousseau's meditations on social philosophy and the philosophy of history were continued in his *Social Contract*.[8] This work has none of the oratorical and lyrical outbursts of the two *Discourses* and its general sobriety of manner lends itself to more careful analysis. Though many of Rousseau's favorite themes reappear in it, they are elaborated with greater care and the commentator is less likely to be led astray by rhetorical flourishes. In several ways he rises above the puerility of his two *Discourses,* abandoning the rejection of society and indeed establishing what looks to the modern reader to be a tyranny as great as any which he had condemned before. But since all citizens share in the establishment of this tyranny, they have no one to blame but themselves for its decisions.

The purpose of the *Social Contract* is stated in its opening sentences. He is to study what political constitution might be set up to harmonize with the nature of man. He is to take man as he is, and the laws as they could be. The nature of man appears to be determined by natural law; that of the laws can be modified by man. That man is of a uniform nature had already been asserted in the two *Discourses,* and in the second Rousseau had stated his conviction that one could uncover it by imagining the variations actually found in all nations and society to be done away with. He reaches, of course, as was inevitable, the nonsocial animal, the lonely savage existing exclusively by his own efforts and for his own ends, without friends or family. He is a purely biological specimen, and the character which Rousseau gives him is one which he could derive from purely biological traits. This is true even of that one saving grace, pity, for it will be recalled that pity is something which he shares with the beasts, just as he shares his erotic and economic instincts. The famous opening of the first chapter of the *Contract* seems to be a repetition of this thought: L'homme est né libre, et partout il est dans les fers. Might he not have been asked to find a man anywhere who was born without parents to nourish him, parents in whose care he would be throughout his infancy, and from whose care he would get not only his food, but the rudiments of his language, his moral standards, and ultimately his feelings of guilt or self-esteem? There are to be sure some animals, the nonsocial insects, and the fishes and reptiles, which never see their young and consequently leave them to be brought up by Mother Nature herself. But as for most of the mammals, including man, it would have made more sense to proclaim that man was born in chains and everywhere seeks freedom.

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[8] *Le Contrat Social ou Principes du Droit Politique* (1762). I quote from the second edition of Georges Beaulavon (1914). As the chapters are short and the work available in many editions, I shall give only chapter, not page references. Beaulavon's introduction is still the best account of its genesis.

But we have to take this author, like all others, as we find him, and the notion which he helped to popularize, that freedom is something which we have lost and which we must recover, must now be clarified. The *Social Contract* is a logical exercise. He finds a conflict between man's essential nature and his universal ways of living. "By nature" he is free; in fact he is always under constraint. "By nature" he is self-determined; in fact all his acts are governed by laws. These laws are man-made and for this reason are nonnatural. That man has a double kind of being was long recognized in the occidental tradition. Many of the Greek philosophers distinguished between what he was by nature and what he was by convention. The Christians knew that he was partly natural and partly supernatural, half way between the angels and the brutes.

Hobbes and Locke had each noted that the state of nature was different from the state in which he now lived and, as we have pointed out above, primitivists all believed that he had "fallen" from his original condition and anti-primitivists that he had risen above it. Aristotle is almost unique in insisting that he is a social animal and that therefore his social life is an essential element in his "nature." The question for Rousseau is "What modifies his nature, why he is not free?" In primitive life, where the only society is the family, as soon as a child's physical dependence upon his parents ceases, he is free. The family is the archetype of political societies, with the father as chief, the children as his people. The only difference is that paternal love accounts for the care which the chief of this society takes of his people, whereas in the state, "the pleasure of command takes the place of this love which the chief does not have for his people" (*ed. cit.,* Bk. I, ch. ii). If one maintains that society is founded on force, that the strongest rules, Rousseau will not deny that one must yield to a force greater than one's own; but he fails to see the legitimacy of this system. The only third possibility is convention, for the primitive family dissolves when the children stand on their own feet and force cannot be justified. A man may voluntarily give himself into slavery and, similarly, may alienate his primitive and natural freedom, but he has descendants. Can he by his free acts alienate the freedom of the unborn? Paternal authority is justified by nature so long as one's children are incapable of reasoning and hence of disposing of themselves. But unless each generation freely alienates its liberty, the system will be unjustifiable. "To renounce one's freedom is to renounce one's humanity (*sa qualité d'homme*), one's human rights, even one's duties. There is no compensation for him who renounces all, and to eliminate all freedom of the will is to eliminate all morality of action" (*ibid.,* Bk. I, ch. iv). What is sought is not a system of master and slaves, a people and its chief, not an aggregation of individuals, but an association. What is sought is not a situation in which a number of people agree to abdicate their wills in favor of the decisions of one, but a situation in which the unanimous choice of a people agrees upon a way of living. The choice must be free; it must be unanimous, for it is only thus that the problems faced when one tries to regain primitive anarchy become too great for solution. The natural man never dies, as far as Rousseau is concerned; he is always here with his primitive nature modified but not lost. The problem then becomes: "To find a form of association which will defend and protect with all the common force the person and the goods of each member of the association, and by which each, uniting with all, obeys himself alone and remains as free as he was before" (*ibid.,* Bk. I, ch. vi).

That the individual retains his freedom in society, that society is an association of free men, not a group of subjects dominated by a king whether hereditary or not, has to be accepted before the rest of Rousseau's argument can be made reasonable. But the liberty which he retains is conventional liberty, not natural, though if the contract be violated, then each returns to the state of nature. The determination of such violation would in fact be impossible short of revelation from a higher power. But there is no higher power than the sovereign and the sovereign is all the people. Nevertheless even in Rousseau's state certain individuals will be charged with executing the sovereign will, and in practice, whatever the theory may be, those executives will have power over the people. But Rousseau believes that after the convention is accepted, all individuals merge into one greater individual, the state, and that hence the executives are as much part of the sovereign people as the people themselves—but no more so. Nevertheless he does not take long to recognize the necessity of the freedom that has been granted by convention taking the whole place of natural freedom. The individuals who make the contract give over all their rights to the whole community. Each gives over his whole person, and this rule is universal. "And the conditions being the same for all, none has any interest in making it burdensome for the others" (*ibid.,* Bk. I, ch. vi). All natural rights have to be surrendered, for if any were kept, then the state of nature would subsist in society and "the association would necessarily become either tyrannical or vain" (*ibid.*). The individual, it should be noticed, does not surrender his natural freedom to any other individual or group of individuals; he surrenders it to the whole community. The whole community, a metaphysical being whose importance was to grow greater in the nineteenth century,[9] has a will of its own in which we participate, since it is formed of our individual wills, and the contract boils down to the following formula: "Each of us makes common his person and all his power under the supreme direction of the general will, and we receive as a member an indivisible part of the whole" (*ibid.,* Bk. I, ch. vi). This mystical body is a moral union created by the moral will. It has a common ego *(moi commun)* which expresses itself in law and whose unity must be preserved by the constant efforts of its members. They in turn are called *citizens* when thought of as participating in sovereign authority, and as *subjects* when submitted to the laws. If one would understand Rousseau, one must always keep in mind the fusion of the individual persons into the common ego, for its decisions are therefore their decisions, its will their will. Consequently there are no real limits to its power and it can change the laws as it will. It is, however, limited by considerations of morality (*ibid.,* Bk. II, ch. iv). "The sovereign cannot"—that is, should not—"load down its subjects with any burden which is of no use to the community." In fact, says Rousseau, he cannot even wish to do so, for by the law of reason nothing is done without cause any more than by the law of nature. Furthermore, it can make no decisions about particular objects, whether persons or things, for its business is general principles. Every citizen must remain in a condition of equality and that equality is lost as soon as the common ego turns its attention to individuals. In Rousseau's own words, it is not a magistrate, but a sovereign. This is a cardinal principle of the whole theory. If the common will, or the sovereign, were to attend to the affairs of an individual, that individual would be singled out and, so to speak, exiled from the community of which he is an inherent and necessary part. *Ex post facto* laws would thus be impossible, and it is likely that laws in favor of or against individuals, recompensing them or punishing them, could not be admissible under such a polity. At the same time an individual may have a will which is in conflict with that of the general will, in which case he exiles himself from the community to which he has previously united himself. In that event the sovereign can force his obedience; can force him to be a free man (*ibid.,* Bk. II, ch. vii), for, as a member of a community, he is not free when he is motivated by rebellion against freedom. The common ego may be *un être de raison,* but it is nevertheless a real being, not a fiction. And as a real being its primary interest is self-preservation. It should not and does not desire suicide and therefore has the power to maintain itself against disobedience. Disobedience for the sake of private interest would be a retrogressive step toward the state of nature, and such steps are clearly destructive of the conventional state which is the community. The plausibility of all this rests on Rousseau's basic assumption of a common ego into which all the individual egos are fused. If the state is what he had called an aggregate, rather than a community, his argument would be absurd. For in an aggregate individuals or groups could properly dispute, and accident or force (whether physical or moral) would settle the conflict. But this, to Rousseau's mind, would be Hobbes's war of all against all.

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[9] See the classic paper of Léon Duguit, "The Law and the State," *Harvard Law Review,* Vol. XXI, No. 1 (November, 1917).

When society is organized as a state, a "very noticeable change occurs in man, the substitution in his conduct of justice for instinct" (*ibid.,* Bk. I, ch. viii). Morality, which was missing in the state of nature—an echo of his second *Discourse*—now emerges and the voice of duty takes the place of physical impulses; law, that of appetite; reason, that of inclination. He becomes more of a man and less of a beast. Hence he gains something by the change.[10] He loses, to be sure, his natural liberty and the right to all that he wants; he gains civil liberty and the possession of his property. The latter benefit could be regarded with a sceptical eye by those readers who had been converted by the *Discourse on Inequality,* but perhaps in a state such as he envisions private property would not have the *effets funestes* such as he had said it had had in history. As for the restrictions on his freedom that are imposed by the general will, they are analogous to those imposed by nature. But a good government will reduce these restrictions, leaving to all as much liberty as is possible with the need for protecting the state.

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[10] The similarity between this idea and that of Herder will be observed probably by all readers. And in view of Rousseau's conception of knowledge, as expressed in the *Profession of Faith of the Savoyard Vicar,* it is unlikely that that similarity is accidental. Yet Herder had at one time a low opinion of Rousseau, as he had of most French writers. See his *Travel Diary* (Suphan ed.), Volume IV, p. 415.

Once the community is established, the sovereignty of the common will cannot be alienated or divided. Its inalienability is inherent in its being general; its indivisibility, also. A general will cannot by definition be less than general. Therefore Rousseau unlike Montesquieu will have none of the principle of the separation of powers (*Contrat,* Bk. III, ch. ii). A state will require officers to carry out its duties, but sovereignty itself resides only in the common ego. The theorists who break it up into executive, legislative, and judiciary are like tricksters who would like to cut a man up in pieces, toss the pieces into the air, and expect to find them coming down as a whole man. The "emanations" of sovereignty can indeed be multiple, but the sovereign itself is one. This would be nothing more than a verbal dispute if Rousseau were arguing about actual historical states, all of which, with the possible exception of Geneva, he finds corrupt. But he is thinking of the ideal state in terms of which real states must be judged. This ideal state is governed by a general will which never can err (*ibid.,* II, ch. iii). For all wills desire the good, though they may be in error about what it is. The wills of the individuals who compose the community may be in conflict with one another, for each man may have an idea of what he desires which is different from and even irreconcilable with what his fellow desires; but the general will, it must be remembered, is not the sum of the wills of the individuals but a new being, a synthesis of individuals. Thus there must be a distinction made between the general will and the will of all the individuals. Any individual can be asked whether a certain proposal is in his particular interest or in the interest of all, and he will know what the question means. That which wills the satisfaction of the interests of the whole community is the general will. One can determine what it desires by taking the desires of all the citizens individually and seeing what they have in common, though if groups of citizens act as a unit against other groups such a result will never be reached. In contemporary America such groups would be the various lobbies which admittedly exist for the satisfaction of partisan interests;

none of them exists for the common good, and their wills represent nothing beyond their own membership. That individuals can live without such organization into smaller social units seems obvious to Rousseau. A man, regardless of church, business, school, is supposed by him to have something in common with all other men and what he has in common is certain desires. These desires apparently need not be expressed in religious or economic terms, perhaps because Rousseau thought of all men as naturally—if not actually—having the same religious beliefs and, similarly, the same simple economic needs. He could be excused for not having anticipated our present complex and highly stratified urban culture and, since he was not talking of any real state, for overlooking ecclesiastic and economic organizations. But his sense of realism was not highly enough developed for him to see that even in societies simpler than that of Geneva or France men cannot will anything beyond their daydreams without involving other people in its satisfaction. Clearly he is thinking of the possibility of each man's thinking things out for himself in isolation from all external influences. He would, then, be following his own conscience. When this is a possibility or when there are numerous little social groups—*des sociétés partielles,* as he calls them—the differences may cancel out and the general will be discovered (*ibid.,* Bk. II, ch. iii). In that event the common ego can never err for the simple reason that it is the common ego. Verbally, at any rate, if there is a general will that is indivisible and if the will has no power above it to censure its decisions, then it is always right.

There is little difference between this and the sovereign will in Machiavelli and Hobbes except in words. To be sure, the common will is in meaning not the will of a Prince, but insofar as both wills determine right and wrong, so long as their sovereignty is inalienable and their decisions infallible, one is back at the old definition of the right as that which is pleasing to the sovereign. It would be small comfort to the citizen, one imagines, to be told that since he is merged into the common ego, he has had a part in governing himself even when the laws seem downright wrong to him. As a private citizen he may will one thing and as a part of the sovereign another, and the two may be irreconcilably opposed. The subject of a tyrant has at least the comfort of muttering to himself against the injustice of the man who rules over him; the atoms of the social will must be satisfied with their split personalities and take what pleasure they can out of their masochism. They can contemplate a mystic union and wonder at its metaphysical elegance; they may reflect that, whatever their personal opinions may be, the common ego is always right. But in hard fact they are in no better situation than the man who is told to trust to God and be patient.[11] But again one should remember that Rousseau is talking about what ought to be and not about what is. But since he bases his ideal on what he supposed to be the common nature of all men, he can be called to account at least for misjudging what that common nature is. To use so general a term as "the right," and to mean by "the right" that which all men would desire if they all desired the same thing, is scarcely a secure foundation for political theory. We call certain biological appetites, such as that found in the sexual drive, by one common name. But one need not have even the erudition of Macaulay's schoolboy to know that the force of the drive, the target at which it aimed, the sacrifices which individuals will make to satisfy it, all vary significantly from individual to individual. The existence of the drive creates no problems; the differences mentioned do. No society, except certain religious groups, ever forbade the procreation of children. But no society ever allowed a man or woman to fulfill his sexual ambitions in any way he pleased. Thus by calling all the objects of desire or choice by an abstract general term, one has the illusion of simplifying the philosopher's problem. But the simplicity is bought at the cost of applicability.

Rousseau himself is uneasy about the conclusion which his readers will draw from his argument. If the sovereign is all powerful and the citizen abandons all his natural freedom once the social contract is signed, then the citizen clearly has no will of his own when he lives in a community. But (*Contrat,* Bk. II, ch. iv) he insists that the sovereign will is always occupied with the general and not the particular interest and thus the individual retains—*ad nutum et patientiam principis*[12]—freedom to do as he likes so long as he likes nothing conflicting with the common interest. This is indeed an important point, and one can well imagine circumstances in which the individual's will does not conflict with the total interest. Whether I prefer to listen to Chopin or Monteverdi, whether I prefer to learn French instead of Swedish, whether I prefer walking to riding, I should be able to satisfy my preferences and not influence the general well-being. These are, however, trivial cases of choice and at most will stimulate debate only within my family or close circle of intimates. But suppose it is a question of earning my living. How long I may work without injuring my health, what kind of work I should engage in, how much I should be paid for my work, under what conditions of light, air, and warmth I should work, are these questions which can be settled without regard for the general good? The answer will depend not on abstract theory, as the history of the nineteenth and twentieth centuries will show, but on the outcome of organized opposition to tradition. There is still a clash in opinion about such matters, though organized labor seems to have won out and to have settled the question in its own favor. What a priori principles can be adduced either for or against *laisser faire* in economic matters? Those on one side are as good as those on the other. And the same situation seems to obtain when it is a question of public health, education, or religious practice. It is certainly true that life in society is preferable—at least to the majority of men—to life in solitude and, when Rousseau points out that one has exchanged natural independence for civil liberty, the power of hurting others for personal security, the necessity of constantly being on guard lest one's goods and independence be taken away for mutual protection, most people would agree that the exchange was profitable all around. Yet is this more than basing one's apology for the state on likes and dislikes? If the ideal is the preservation as far as possible of so-called natural values, how are they preserved when they are clearly abandoned? One must admit that common sense is in favor of Rousseau's choice; but if one is to take common sense as one's judge of philosophical postulates, then there is no need to start with other postulates which are in contradiction with it.[13]

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[11] Cf. Etienne Gilson's introduction to his edition of Pope Leo XIII's encyclicals, published under the title *The Church Speaks to the Modern World* (Garden City, N.Y.: Doubleday & Co., Inc., 1954), p. 11. Professor Gilson points out that since all authority comes from God, however it may be instituted by man, it must be obeyed without question until God sees fit to change the situation.

[12] It is obvious, I trust, that these are not Rousseau's words.

There is no need here to discuss the details of Rousseau's system, for they have little to do with the philosophical bases upon which they are supposed to be built. What is important, however, is again to accentuate these bases, for they were to become traditional both in ethical and political philosophy of the idealistic school. That men all have a common nature, that it can be discovered by a quasi-comparative method of eliminating the contributions of society, that therefore societies are an addition to the common nature of man, that his nature can best be found in his will, that the individual's will when liberated from social impediments will merge into a greater social or general will, that the general will is superior not only in its ends but also in its nature to the individual will, that the mystical union of individuals into the group is a benefit conferred and no loss of anything of value, all this appealed greatly to such men as Kant and his followers. Kant, too, saw the problem of ethics as the reconciliation of natural man and moral man,[14] and his Categorical Imperative with its voluntaristic foundation and the necessity of universal ways of acting was quite in keeping with Rousseau's assumption.

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[13] Rousseau himself realizes that the forms of governments are bound to vary from nation to nation for the simple reason that in actuality all men do not desire the same goods. The aim of all political associations is the same: the protection and the prosperity of their members (*ibid.*, Bk. III, ch. ix). Toute chose d'ailleurs égale, le gouvernement sous lequel, sans moyens étrangers, sans naturalisation, sans colonies, les citoyens peuplent et multiplient davantage, est infailliblement le meilleur. Celui sous lequel un peuple diminue et dépérit est le pire.

4. The Profession of Faith of the Savoyard Vicar

The fourth book of *Emile* contains a compendious statement of Rousseau's philosophical beliefs in the "Profession of Faith of the Savoyard Vicar."[15] The main theses which were to survive out of his philosophical writings appear in it and, though Rousseau puts the credo into the mouth of a village priest, it is generally believed that it is his own. There seems to be no reason to dispute this and I shall interpret the opinions of the Vicar as if they were Rousseau's.

The piece is divided into several parts, the first of which deals with religion. Rousseau disclaims any great scientific knowledge and any desire to be a great philosopher. His purpose is to expound "what he thinks in the simplicity of his heart" (*ed. cit.,* 39). That it is his heart which speaks, and not his reason in the Voltairean sense of that word, is important. The results of looking into his heart are, he believes, sounder than those which would have resulted from rational deductions. And the fact that he makes his spokesman poor and a peasant is obviously to show that the heart of even the simple and lowly is as truthful as that of the sophisticated. It is not reason which unites all men; it is this innate ability to grasp the truth without reason. And, judging from what his heart shows him, Rousseau is one with Herder and later German philosophers in distinguishing between *Vernunft* and *Verstand* and attributing greater power to the former. A synonym for the heart is the conscience. One needs no great learning to heed the dictates of conscience. It always "follows the order of Nature against all man-made laws" (*ibid.,* 41). And since, when one consults the books of the philosophers, one runs into a mass of contradictions, the only thing to do is to follow the inner light (*ibid.,* 61). One may be led astray, but the error will be one's own, not that of one's guides. That one's own errors are less significant than those of others is an interesting idea.

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[14] See *Muthmasslicher Anfang der Menschengeschichte* (1786; edited by the Prussian Academy), Volume VIII, p. 116.

[15] I use the edition of P. M. Masson (Fribourg-Paris, 1914).

But Rousseau does not really think that the inner light will ever be erroneous so long as one uses it for those things which it is fitted to illuminate. On this point he is one with Socrates.[16] Man's first cognitive task is to find virtue, and that will never be found in elaborate metaphysical systems that are devoted to discussing the nature of matter, the number of worlds, and all the usual problems of such writings.

The first truth which is given him by the inner light is his own existence and his possession of sensory affections (*ibid.*, 73). Though in some of his other writings Rousseau had accepted the sensory origin of all ideas, here he makes a sharp distinction between those ideas which come from sensation and the idea of himself. "My sensations occur within me, since they make me aware of my existence; but their cause is external to me since they affect me in spite of myself and since I have no power (*il ne dépend de moi*) to produce them nor to wipe them out" (*ibid.*, 77). Thus he is aware of a sharp separation between himself and his sensory impressions, and whether he means to or not, he fortifies his awareness with rational argument. He might have reasoned that, if all ideas came from sensation, the idea of the self must have come from sensation also or be no idea, as Hume did. But the self is not simply one of his ideas. It is possessed of an active force which had been granted it previously by the English Platonists and was to be emphasized by Kant.[17] The passage is so historically important that I quote it in full.

> To perceive is to feel, to compare is to judge. To judge and to feel are not the same thing. By sensation objects are presented to me in separation, isolated, such as they are in Nature. By comparison, I move them, I transport them, so to speak, I put them one upon the other in order to pronounce upon their difference or their likeness and in general upon all their relations. In my opinion the distinctive faculty of the active or intelligent being is the power of giving a sense to this word *is*. I seek in vain in the purely sensitive being that intelligent force which superimposes and then pronounces [judgment]. I should not be able to see it in its nature. This passive being will feel each object separately, or even will feel the total object formed of the two [being superimposed]. But having no force with which to lay them one on the other, it will never

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[16] And, as Masson points out, p. 59, note 1, with a number of eighteenth-century proto-pragmatists.

[17] On the influence of the English Platonists on the Kantian epistemology, see A. O. Lovejoy's "Kant and the English Platonists," in *Essays . . . in Honor of William James*, 1908; on Rousseau's influence on it, see Gertrude Bussey's "Anticipation of Kant's Refutation of Sensationalism," *Philosophical Review*, 1922.

> compare them or make any judgment about them whatsoever (*ibid.,* 79).

That perception and judgment were two different faculties had been long admitted, but the latter had been thought of by some men to arise as passively as the former. Indeed one might ask how one could verify any judgment by impersonal means if judgment were a purely subjective or personal faculty. In Kant that was to be explained by the transcendental unity of apperception. The active power of the judging mind always behaved in the same way in all individuals, using the same categories, which because they were transcendental, seemed to be external. In Rousseau the judgment acts upon real objects, or upon sensation which may well reflect the real nature of the objects. For the question of the subjectivity and objectivity of sensory objects does not interest him (*ibid.,* 77). In the second place Rousseau establishes to his own satisfaction that sensory data always arise in isolation from one another. In this he follows the English Platonists who also maintained that relations could not subsist in the world of Nature but must be something added to the natural order. For that matter, Locke also in the latter parts of his *Essay,* as we have seen, attributes an active power to the mind when it compares or when it forms complex ideas. But perhaps the most startling thesis in the paragraph cited is that only the action of the intelligent being can give any meaning to existence. Existence is then a predicate which is given to the data of sensory experience by the mind itself. It is the mind which decides whether its experiences exist or are illusory and not the data which proclaim their reality. The data are neutral as far as telling us anything about reality. Existence is not a confrontation, it is the result of a judgment. In the fourth place, Rousseau in developing this passage points out that if judgment and perception were identical, or if the former were passive, we could never be in error. If the judgments of relation were only sensory and came uniquely from the objects, then "my judgments would never deceive me, since it is never false that I feel what I feel" (*ibid.,* 87). It is we who err, not Nature. Nature simply is. If all assertions by their very nature have to be asserted by someone, then error must be attributed to him who makes them. Finally Rousseau maintains that since all sensory data come to us one by one in isolation, for all objects with more than one sensory quality, we ought to have the same number of objects as it has sensory qualities. That is to say, a white, hard, sweet object ought not to be apprehended as a single object at all but as three objects, one of which is white, one hard, one sweet. In traditional epistemology the unification of the sensory qualities was made by what was called "the common sense." But in Rousseau it is made by the active power of the judging subject, whether it be called attention, meditation, reflection, or something else. This active power speaks through the *sentiment,* not through the reason, though reason may justify its lessons.

This does not imply, according to Rousseau, that we should never follow the senses. The senses do teach us certain things about the external world, and from their teachings physical sciences can be constructed. They show us that the external world is material and that it is composed of objects now moving, now at rest. Rest is their "natural state," not motion; and, when they move, it is because of an active force moving them. Motion that seems to be initiated by purely material objects is simply transmitted motion, examples of which are seen in billiard balls colliding with one another. But genuine autokinesis is found only in human beings—though it is possible that Rousseau might have granted it also to living beings in general. Since he is interested in men, not beasts, he attributes the initiation of motion to the will and maintains that the feeling (*sentiment*) of causing motion is itself evidence that one causes it. If all motion originates in the will, the motion which is studied by the physicists must also originate in a will; and, unless one is willing to follow an infinite regress, one must sooner or later reach a first cause of motion which is, of course, God. *Voilà mon premier dogme, ou mon premier article de foi* (*ibid.,* 111). This primary dogma and article of faith is thus not founded on sentiment at all; it is a deduction from his own sentiment of his own movements. It follows, in general, the traditional argument, found in ancient times in Aristotle and in the thirteenth century in St. Thomas Aquinas. As an argument, its force rests on the assumption that all motion in material objects is transmitted to them from other moving objects and that no matter is "naturally" mobile. If then we state the argument as based on the major premise "When an object is moved, it is moved either by another moving object or by an immaterial force," we have, it would seem, begged the question.[18] If one were to base the argument on sensory observation, then there would be no more reason to assume as a premise the immobility of matter than its contradictory. We observe matter both in motion and immobile, and, if one accepts the first law of motion, the question of what initiated the motion does not arise. Be that as it may, Rousseau in common with most philosophers of his time rejected the possibility of matter moving itself; and clearly, if the only other possibility of a cause of motion is the will, then there is no logical error in concluding that a will moves matter. One might hound Rousseau then into maintaining that the only sources of motion are human wills. For if he is going to rely on sensory observation, it is either his own or other people's, and neither he nor anyone else ever had direct evidence of any will other than his own. But such insistence is perhaps cruel, for Rousseau is only too happy to remark that he has not the slightest idea of how the will moves matter, nor will he explain how sensory impressions, which begin by being physical, can affect his soul (*ibid.*). Interaction exists. How it operates is mysterious.

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[18] In the Latin of St. Thomas the passive is indeed used. And, obviously, if one uses the passive voice, one is involved in circularity.

The first cause of motion not only moves objects but moves them according to certain laws. This is evidence of intelligence. He does not pretend to know *what* the aims and purposes of this cosmic intelligence are; but he is convinced *that* they are. The harmony and interconnections of all beings, animate as well as inanimate, prove that they are not the result of chance relationships. The senses perceive this order, the inner feelings announce it as the work of intelligence. Moreover the universal order is maintained through time, and no series of chance occurrences could explain that. Chance might, though Rousseau would probably refuse to admit this, produce a single case of order, but the constant maintenance of the order produced would be so improbable that one might conclude to its impossibility. This second argument is a species of cosmological proof, but it is an addition to the proof from orderliness observed at any one moment. One may throw a penny ten times and get ten heads. The chances of doing so can be calculated as "ten" to the tenth power. But if one continues endlessly to get heads on each throw of the penny, then one concludes that the penny is loaded in such a way that it will always turn up heads. Every calculable series of events has some fraction of probability and there is no a priori law which determines when one should translate a high degree of improbability into impossibility. But Rousseau does not engage in such subtleties, for reasoning from probabilities was foreign to his own character. He is content with writing, "I join to this name [of God] the ideas of intelligence, power, will which I have combined, and that of goodness which is a necessary consequence of them; but I do not know the Being to which I have given these names any the better for that; he escapes both my senses and my intelligence; the more I think about it, the more confused I become: I know with great certitude that He exists and that He exists through Himself;[19] I know that my existence is dependent on His and that all things known to me are exactly in the same condition. I perceive God especially in His works, I feel Him in myself, I see Him all about me; but as soon as I wish to contemplate Him in Himself, as soon as I wish to find out where He is, what He is, what is His substance, He escapes me, and my troubled mind perceives nothing further" (*ibid.,* 145).

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[19] That is, God is self-caused.

Intelligence, power, will, and goodness, however perfected they may be in God, are traits derived from the human mind. And yet though the eternal mind has created a world which is perfect and good, the human soul is tortured by evil. Rousseau does not develop an answer to the problem of why there should be evil in a perfectly good world ruled over by a perfectly good governor, but he hints that evil in human life arises when a man acts on the impulsion of external objects, rather than on that of his own judgment. Man is free to do either. Freedom for Rousseau, as it was to be for Kant, is identical with self-determination. One first decides what to do and then does it. But just as a man is free to err, so he may follow the wrong decision. But that he is not determined to be right or always wrong is a fundamental principle. The will cannot be separated from judgment, except for purposes of conversation. One cannot just will in a void; one has to know what one is willing; and that knowledge is just as much knowledge as any other bit of knowledge. The freedom of the will is based on the freedom of judgment; the judgment does not follow the will. Though Rousseau is what was called in his time a sentimentalist, it must be remembered that his form of anti-intellectualism was not that of a man who would maintain that all thinking rests on anti-rational principles. For the *sentiment* gives us true knowledge, just as reason does, and when one has a clear idea of its teachings, one can then proceed to deduce logically certain consequences. The anti-intellectualism involved in all this is the anti-intellectualism of the choice of premises. One does not reason to one's premises, for that is impossible. Some are derived from sensory observation; others from within. Choice of what conduct to pursue should come from within. If that course is followed, then freedom ensues. Such freedom is harmonious with man's essential nature and shows him to be a creature not less but more perfect than the beasts and the rest of creation. He alone can be self-determined; the others always act as they are forced to act by external causes. "To murmur against God's not having made us incapable of doing evil, is to murmur against His having made us of an excellent nature, of His having ennobled our acts with morality, of His having given us the right to virtue. The supreme pleasure is in self-contentment . . . What!

Should He have limited us to instinct and made us beasts so that we might be prevented from being evil? No, God of my soul, I shall never reproach Thee for having made man in Thine own image, so that I might be free, good, and happy like Thee" (*ibid.,* 191).

It goes without question that Rousseau also accepted as one of his fundamental dogmas the immortality of the soul, thus completing the trio of God, freedom, and immortality. Though he spends more time expounding what our immortal life will be like than on proofs of immortality, it is clear that a being which is not material could not be destroyed. If Rousseau had made the existence of a soul depend on the existence of those material objects which gave rise to its sensations, so that once the sensations had passed away, no soul would be left, or if he had made it dependent on the body, there would have been few grounds for believing in its immortality. There might still have been the ground that a being does not cease to exist when the causes of its existence have ceased to exist. Otherwise there would be no orphans in the world. But Rousseau does not reason in this or similar fashion. He probably takes it for granted that a simple immaterial being could not go out of existence except possibly by annihilation. The question of its origin he leaves unsolved.

Rousseau's final comment is advice to flee from philosophy, that is from the rationalists. Their teachings will lead to scepticism and materialism. "Good youth, be sincere and true without pride. Know how to be ignorant and you will deceive neither yourself nor others. If ever your cultivated talents put you in a position from which you may speak to men, never speak except in accordance with your conscience, without caring whether they applaud or not. The abuse of knowledge produces incredulity. Every *savant* disdains popular sentiment, everyone wishes to have his own. Philosophy in its pride develops a headstrong spirit [*l'esprit fort*], as blind piety leads to fanaticism . . . Dare to confess God's being when amongst the Philosophers; dare to preach humanity to the intolerant. You will be the only member of your party, perhaps, but you will carry within yourself testimonies which will not require those of others. Let them love you or hate you, let them read or despise your books. It matters not. Speak the truth, do good. Man's one important task is to fulfill his duties here on earth, and it is in self-forgetfulness that one works for oneself. *Mon enfant, l'intérêt particulier trompe; il n'y a que l'espoir du juste qui ne trompe point*" (*ibid.,* 473). With these pathetic words the *Confession of Faith* ends.

Nothing is easier than to ridicule Rousseau, for there is much in him which is ridiculous. His bombast, his oratorical flourishes, his entire lack of humor, his personal character which emerges here and there even in his purely expository passages were not likely to persuade men of a rationalistic turn of mind. But there were plenty of men, and some like Robespierre who were far from being soft-hearted, who listened to his assertions and absorbed them without debate. Sentimentalism ran through the second half of the eighteenth century and into the nineteenth alongside of its conflicting doctrine. Robespierre who exclaimed in the Assembly that he would have been lost in political battles if he could not have lifted his soul to that Eternal Being whom he knew in his heart to "watch over the French Revolution in a special manner"; Bernardin de Saint-Pierre, Saint Martin, *le philosophe inconnu,* Chateaubriand who said that his conversion to Christianity came from the tears he shed at the death of his mother, Mme de Staël, all were impregnated with the spirit of the Confession of Faith. In particular, certain precepts stand out as of greatest importance. They include above all the notions that freedom is essential as a basis for morality and that all wills desire the good. The distinction between man's passivity in sensation and activity in judgment and willing was one which was to be accepted finally even by men who started as his opponents, men such as Maine de Biran and the Neo-Christians. As the Abbé Bautain was to say in 1839, "The man of today with moral needs more profound, conscience more enlightened, ideas more vast, views which tend towards the universal, sublime presentiments, burning anxiety—the man of today is no longer [Condillac's] man nor his statue. He no longer recognizes himself in a sensation machine, in an ideological mannikin or in a mass organized to feel." [20] This difficulty was probably an effect of the career of Napoleon. Of all people the Emperor was not an ideological mannikin; it was his strength of will which seemed to conquer obstacles insuperable to patients of external influences. But before discussing this tradition, we must take up the opposing view of knowledge, that which was propounded by Condillac and developed by the Ideologists.[21]

[20] *Philosophie-Psychologie Expérimentale* (Strasbourg and Paris, 1839), Volume I, ch. xxi.

[21] Since I shall not be able to expound this tradition in detail, the reader may be referred to my *French Philosophies of the Romantic Period* (Baltimore: Johns Hopkins Press, 1925), chs. I, II, and III.

CHAPTER 12

Knowledge as a Complex of Sensations

1. CONDILLAC

THOUGH Rousseau did not deny that much of our knowledge was perceptual in origin, he insisted that the most important knowledge came from within. Importance to his way of thinking was to be measured in moral terms, and he followed what he believed to be the Socratic lead in assessing what was of moral value and what not. Condillac (1715–80) on the other hand made an attempt to compose all knowledge whatsoever out of sensory materials, following, as he erroneously thought, the teachings of Locke. His attempt which was expounded in his *Traité des Sensations* (1754) started a train of philosophizing in France that is one of the few cases of a logical development of an idea to the point where its exponents throw up their hands in despair and admit their failure to account for one of the most ordinary of human experiences. I refer to that short-lived philosophical tradition known as Ideology. The debates between the Ideologists and their opponents, the disciples of Rousseau and the Traditionalists, constituted the philosophical atmosphere of the last half of the eighteenth century in France.

Condillac began his epistemological studies with his *Essay on the Origin of Human Knowledge*, 1746 (*Essai sur l'Origine des Connaissances Humaines*). In this work he started from the premises of John Locke, for Locke, he maintained, was the sole philosopher who had tried to discover the origin of our ideas instead of accepting them ready-made and seeking to divine their nature. The great error of Descartes, Malebranche, and Leibniz, whose systems he criticized in a book published three years later,[1] was to assume the possibility of knowing natures rather than operations. Condillac never rejected the distinction between these two possible subjects; like David Hume he admitted its legitimacy but maintained that natures were impenetrable to the human mind. Inner natures were going to turn into things-in-themselves in the first Critique of Kant. It was not until post-Kantian philosophy and positivism had gained the upper hand that the existence of unknowables was flatly rejected by philosophers.

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[1] The *Traité des Systèmes* (1749). A study of this work seems to me to be essential for a sound understanding of the rejection of metaphysics by the later eighteenth century in France.

Neither in his volume on the origin of knowledge nor in his better known *Traité des Sensations* (1754) does Condillac deny the existence of a soul. The soul is needed in both works to perform the operations which constitute knowing. It is the agent which receives sensations from without and puts them together to form ideas. In Locke's fourth book of the *Essay* it is the mind, the knowing subject, which compares, contrasts, remembers; that is, the Ego, if one will; or the grammatical subject of judgments. Therefore Condillac never decomposed the soul or subject into a complex of sensations, nor did he, like Hume, deny that the term had any meaning. This is worth remembering, for his psychophysical dualism entailed, he thought, the explanation for those personal errors of judgments which were peculiar to the human race. The contents of the mind for him were not images of the external world. Knowledge was, above all, judgments, and to his way of thinking judgments were formed through the use of signs. The very opening sentence of his *Essay* asserts in no wavering terms that we can know only our own thoughts; we can never emerge from ourselves. If I insist upon this it is because one of the influences of Condillac was on French literature. When Stendhal boasts of being an Ideologist, he also is asserting that psychological analysis is the one task worthy of a writer and, if the long tradition of psychological analysis in French literature obtained the hold which it has had upon the French imagination, it is perhaps owing to the extraordinary precision of such investigators as Condillac, Destutt de Tracy, and their followers. One could not, of course, say that before 1750 men and women were not interested in what was happening in their inner life. Neither Ovid when he wrote the *Tristia* nor for that matter St. Augustine when he wrote his *Confessions* had to read a treatise on the analysis of sensations before sitting down to write. But the narrative of action could be said to have been the rule before the nineteenth century, whereas the narrative of psychological analysis became the rule afterwards. Rules are nothing more than generalizations which admit of exceptions, and it is in that sense of the term that I speak of the influence of psychological analysis on literature.

In the *Essay* Condillac gives what he believes to be a proof of the existence of a soul distinct from the body; in the *Treatise* he takes it for granted. His proof is interesting. If the soul were material, it would be a composite of several individual substances, an "assemblage or collection." [2] When material particles are assembled or collected together, they are not united into a whole but are simply closer together than they were previously. Their multiplicity is not lost and, if such a collection were to be the subject of thought, there would have to be a thought for each particle to possess. But thought is actually a unit, as its subject is a unit. If each particle were to have its own thoughts, then when, for instance, comparisons are made, who is to make them? Particle A could not compare thought X with thought Y if it possesses only thought X. It is therefore necessary to posit "a meeting point," a substance which would be at the same time the simple and indivisible subject of various perceptions, distinct from the body, *une âme, en un mot* (*ed. cit.*, 22).

This existence of a thinking subject once having been demonstrated, its cognitive possessions may be analyzed. These possessions are primarily sensations, but sensations not merely as sensory qualities, such as red, blue, green, loud, soft, sweet, sour; every sensation is seen to have three distinguishable traits: (1) the perception itself, that is, the perceptual quality; (2) its relation to something external to ourselves, a relation made by us, that is, that the color is the color of an external object; (3) the judgment that this relation is veridical. Thus Condillac, when he analyzes our ideas into their primary sensations, is talking of elements which in themselves have several properties. A sensation as he uses the term would be expressed by a sentence such as the following: "I am seeing a real red apple." Sensations are assertive. They are not the sense data of the modern New Realists. He does not deny the existence of such sense data, but he does not consider them the elements of knowledge. Knowledge, in short, cannot be reduced to anything more elementary than simple judgments and judgments have to be made by someone. In the *Treatise* sensations are handled somewhat differently. There each sensation is said to have four separable properties: the sensible quality itself; its affective character, that is, its pleasantness or unpleasantness; its duration; and its likeness or unlikeness to other sensations. But here, too, it is the soul's awareness of these properties which determines its judgments, and judgments are still the elements of cognition.

If judgment always involves relating what is immediately before the soul to something else, whether the operation be that of simply relating a color to an external object or of comparing two colors or of pronouncing on the reality or unreality of what is before one, then some instrument for binding ideas together or for distinguishing between them must be provided. In the *Essay* this instrument is signs. Signs, he says (*ibid.,* ch. iv), may be of three sorts: (1) accidental signs, or objects which by chance happen to be associated with certain of our ideas and which when experienced arouse the ideas associated with them; (2) natural signs, "or the sounds which nature has established for the feelings of joy, fear, griefs, etc.," in other words, emotional ejaculations; (3) conventional signs, which we have instituted ourselves and whose relation to ideas is arbitrary. Signs of these three sorts, in varying degrees, explain the operations of memory, imagination, and reflection, each of which utilizes signs to replace that of which they are the signs. Signification then is the secret of thinking, and it is because we can substitute signs for what they signify that our minds can operate in the absence of the external world. The invention of signs alone can explain, he maintains (*ibid.,* Bk. IV, ch. i), such sciences as arithmetic, for we can form no clear idea of large numbers but do have names for them, which names are defined by means of signs for clear ideas of, for instance, a unit and for relations which constitute a progressive series. The idea of 1000, to take his example, acquires meaning simply because we have invented names for the unit, for the operation of addition, and for the serial order which that operation entails. Even a person who did not wish to communicate his ideas would have to invent a system of signs for himself if he were to do any calculation. Condillac is careful to point out that he is not talking here about the order of the genesis of our ideas at all; he realizes that we have the idea of 1000 without knowing how we acquire it. But when we wish to define it, we do so inevitably by analyzing the meaning of the sign by which it is named. Genetically we often learn the name before knowing anything about that which it names. Analysis enters when we wish to discover the meaning of these names. This would seem to imply that knowledge is the satisfaction of curiosity, the exploration of significance. But one should be wary of reading more into Condillac than he attempted to put there. He does, however, say explicitly that we have more words in our memory than we have ideas. "This must be," he adds (*ibid.,* 183), "naturally so; either because reflection, since it comes only after memory, has not always gone over carefully enough the ideas to which it has given signs; or because we see that there is a long interval between the time at which we begin to cultivate the memory of a child by inscribing on it many words of which the child is not yet able to note the ideas, and the time at which he begins to be able to analyze his notions so as to become aware of them" (*ibid.*). We use words as we acquire them without being too sure of their precise meaning. If only teachers would begin by talking to their charges exclusively of those things fitting to their age and needs, if only they would use precise words for definite things, even when playing with them, children would grow up without mental confusion. But this scarcely ever occurs.

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[2] I am using the edition of An VI (1798).

Having started his epistemological studies in this way, Condillac enlarged them with his better known *Treatise on the Sensations.*[3] There is no need to begin a discussion with Condillac's fiction of a statue endowed with the sense of smell and continuing with each of the senses. The fiction is known to everyone who has ever read a bit of philosophy and it served merely as a device, like that of man in a state of nature, to show how the contents and faculties of the mind could be constructed out of a human being who had none of the possessions of experience. It is more important for our purposes first to set down in an orderly fashion Condillac's principal assumptions. They are (1) the soul is a spiritual substance without character; (2) the analytical theorem: all wholes can be broken up into elementary parts; (3) these parts are externally related to one another. The first assumption means that the notion of a substance without attributes is retained by Condillac and that the contents of knowledge, and the psychic faculties as well, do not constitute the substance being discussed but are properties of it. In other words, it is meaningful to speak of a soul that has no consciousness whatsoever, no powers of remembering, attending, wishing, thinking, comparing, and the like. Consequently Condillac's problem is not merely to construct the contents of knowledge, both simple and complex, out of elementary sensations, but also the operations of the mind. The analytical theorem involves the belief that the elements can move into and out of composition without changing their nature. The soul-substance provides simply an agent which acquires functions through experience, manipulates the contents of that experience but does not modify them. The great problem which has to be faced by this sort of analysis is what is an element. Elements are normally determined by the processes used in analysis. Thus psychological inspection can find nothing composite in a color. such as violet or orange; they are *sui generis.* But if one is thinking in terms of pigments, then each is a compound and we know that, if one looks at a patch of violet or orange paint with a microscope, one will see little grains of blue and red pigment or of yellow and red as the case may be. One cannot see these in the perceptual violet and orange, but one can see them in the material violet and orange. But the red, blue, and yellow pigments are themselves chemically composite and other processes of analysis are needed to decompose them. It then turns out that a certain yellow (cadmium) is a sulfide (CdS), and a certain red (red lead) is Pb_3O_4. Are we then to say that when we are looking at a patch of red we are "really" seeing a compound of lead and oxygen? No one would be so extreme, for, if he were, he too could be pushed back to the point of breaking up the molecules into atoms, the atoms into subatomic parts. Condillac is content with going as far as the sensations, by which he means the sensory qualities, but how he reaches them he does not tell us. Nor does he seem to feel the need of justifying his belief in the permanence of the sensation once it is discovered. Yet even the perceptual quality of a sensory datum will vary in accordance with neighboring sensory data, which every painter and every musician knows. So every word in a sentence may vary in meaning with the context in which it appears. The work of the Gestalt psychologists has shown us that the elements reached by introspective analysis are far from being elements of the *Gestalt* in the sense that psychologically—whatever may be the case of the physical things perceived—they are elemental. Just as middle C on the piano may be the tonic of the major triad of C major, or the mediant of A minor or any one of a host of other things, so we often have to perceive a whole as a whole and then determine what its parts are by a quite different type of perceptual operation. It is the operation which determines what will be elemental and not the elements which determine the operation. This is specially important nowadays when the meanings of whole sentences are said to be found as complexes of the meanings of their so-called elements. The meaning of the sentence, "This apple is red but that one is green," depends as much on the conjunction "but" as on the two elemental clauses.

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[3] Quotations of this work are from H. W. Carr's translation of Condillac's *Treatise on the Sensations* (Los Angeles: University of Southern California Press, 1930).

According to Condillac, every sensation will have the following four properties: its sensible character, its affective character, its duration, and its similarity to other sensible qualities. These will or may be all perceived by the soul as soon as it has more than one sensation. To put it somewhat differently, all sensibles have specificity; that is, are red, or green, or sweet, or sour, or hard, or soft, and so on; are agreeable or disagreeable; appear and disappear and thus have a temporal dimension; are like and unlike others. As a result of these four properties, the soul will develop operations which are functions of them. From specificity, there will arise no idea of matter whatsoever, but simple awareness of what is before one. From the affective coefficient will arise desire or aversion. From the duration of a sensation will arise memory, and from its repetition, habit. From similarity and dissimilarity will arise comparison and judgment. If sensations did not have these four properties, but, let us say, only specificity, the soul would be identified with each sensation as it appeared and presumably if we had before our eyes only redness for an indefinite period, we should have neither desire, nor attention, nor memory, nor any other faculty.

Habit became, for Condillac, the basis of attention, recall, comparison, judgment, imagination, and recognition. It was all-important to him, as it was to be to Maine de Biran, Ravaisson, and in some respects to Bergson. Condillac knew—as Hume apparently did too—that habit was not simple repetition. Habits may be "only a facility of repeating what we have already done" (*Treatise, ed. cit.,* Bk. I, ch. ii, 13), but repetition brings increased facility. This facility is strengthened by frequent repetition (*ibid.,* 40–41), so that habitual processes never retain their original character. Furthermore, Condillac recognized what is called nowadays the compulsive force of habit, when he says that a desire when it has become habitual is what is called a passion, "that is to say, a desire which drives out all others, or at least becomes dominant" (*ibid.,* ch. iii, 3). If by "facility" he includes the idea of the process being shortened in the amount of time it takes to perform it, then he also recognizes the telescoping of the temporal dimension in habitual action. Moreover, habit establishes for us certain truths about the world which we do not question; it is what is called by other philosophers common sense. Thus in discussing the sense of touch, Condillac argues that touch would make us familiar with groups of properties being constantly conjoined but would never give us ideas such as those of being, substance, essence, nature, etc. And he adds, "From its habit of judging that each body is a collection of many qualities it will seem to it quite natural that they can exist united, and it will not trouble itself about any underlying connection or support. Habit often takes the place of reason in ourselves, and we must agree that sometimes it is worth more than the reasoning of philosophers" (*ed. cit.,* Bk. II, ch. viii, 21). Habit here actually gives rise to a new notion which replaces that of substance or rather makes any idea of substance unnecessary. The habit of perceiving—in this place through touch—a group of qualities constantly connected makes, so to speak, a thing out of the collection.

The same objection that has been made to Hume, who explained our idea of causation as arising out of the habit of seeing constant regularities, would be made to Condillac. But, unless I am reading too much into them, they are both giving a psychological explanation of why we believe in something and not a logical definition of that which is believed in. By a logical definition, I mean a definition in terms of logical primitives. No one could deny that the meaning of the word "thing" as usually found is not equivalent to the meaning of the words "a collection of qualities." But that is not an objection against the psychological explanation of our belief in things or of the psychological origin of our idea of a thing unless habit does not actually have the power which Condillac and Hume give to it: that of changing the nature of what is habitually done or perceived. Similarly one cannot deduce from "I am habituated to smoking twenty cigarettes a day," the sentence "I ought to smoke twenty cigarettes a day"; but on the other hand the habit of smoking twenty cigarettes a day will produce in a person the compulsion to smoke that many. That Condillac had seriously considered the nature of habit is obvious throughout his *Treatise,* but the most compendious evidence is in a paragraph which concludes his section on the sense of touch. He is talking about instinct and calls it "the habit of directing oneself by ideas for which one does not know how to account. This habit, once contracted, guides one surely, without one's having the need to recall the judgments which made one contract the habit" (*ibid.,* Bk. II, ch. viii, 35).[4] It may very well be true that Condillac has not succeeded in explaining through habit all that he wishes to explain through it; but he should not be criticized for what he was not attempting to do.

There is an interesting sentence or two which indicate that for Condillac judgments become transmuted into sensations. Having pointed out that one learns the origin of sounds in tangible objects through the habit of touching sonorous things as one hears them, he says that we judge that the sounds come from the objects; we do not hear them coming from them or obviously feel them coming from them. This judgment which is repeated on several occasions induces us to confuse judgments with sensations. "And when a judgment has been confused through habit with a sensation, it will be confused with all sensations of the same kind" (*ed. cit.,* Bk. III, ch. ii, 5). This important sentence is an attempt to explain what is traditionally called immediate knowledge. Immediate knowledge appears when we have some experience or other of a very simple kind and say "I hear the bell," or "I see a red rose." Such judgments are not strictly true, since one cannot hear a bell; one can hear only a sound. Similarly one cannot see a rose; one can see only a color. The attribution of the sensory data to objects is made by repeated associations, and since anything repeated may become habitual and, if habitual, very rapid and compulsive, the judgment is immediately made. Condillac does not doubt its truth, for its truth is not in question. But he gives us a reason for thinking such judgments immediate, when they are in fact learned, and for believing in them so strongly. "If one had never heard the same sound except upon touching the same shape, and upon touching the same shape had always heard the same sound, one would think that shapes carried in them the ideas of sounds, and that sounds had in them the ideas of shapes, and one would not be able to assign to touch and to hearing the ideas which belong to each of these senses. In the same way, if each sound had continually been associated with a certain color, and each odor with a certain sound, it would not be possible for one to distinguish the ideas which one owes to smell from those which one owes to hearing" (*ibid.*, 8). These very rapid and habitual judgments which give us our knowledge of objects, of externality, of duration, of complex things with several sensory properties existing at various distances from us, he calls "practical judgments" (*ed. cit.*, Bk. IV, preamble).

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[4] In the text Condillac is talking of his statue. I have replaced the pronoun "it" with "one."

Condillac had insisted that no sensory quality in itself is evidence of an external world of independent objects. They are all "modifications" of the soul. In that he was in agreement with Berkeley and with the Cartesian tradition in France. But both Berkeley and Descartes felt the need of demonstrating the existence of an external world; the latter, through the impossibility of God's deceiving us; the former, through the appearance of ideas of which we cannot be the cause. Condillac attempts a new demonstration through the sense of touch. Dr. Johnson had made a similar demonstration against Berkeley's immaterialism. But the verb "touch" was used more subtly by Condillac.

The imaginary man whose soul is void of sensations, the famous statue, was given one sensation at a time. All sensations, it will be recalled, have an affective aspect, they are either pleasant or unpleasant. If a man be given the power of movement, it may be expected that as long as his sensations are pleasant he will enjoy them in repose. But as soon as he experiences an unpleasant sensation he will shrink away from it. This withdrawal does not have to be learned the first time—Nature will take care of it; one's muscles will automatically contract at the experience of pain. The change from an agreeable sensation to a disagreeable one will be the source of movement, and the utility of the movements resides in their helping a man to avoid the harmful—that is, the painful—and to enjoy the pleasurable. These movements will help a man discover that he has a body, for his hands will move over his body and discover its difference from his soul. It then discovers that bodies are impenetrable. "We do not, strictly speaking, feel that bodies are impenetrable: we judge that they are. This judgment is a consequence of the sensations that they produce in us" (*ed. cit.,* Bk. II, ch. v, 3). It is made from the sensation of solidity, for we perceive that when two objects that we feel as solid collide, they resist each other and do not interfuse. But touch has a property which the other sensations do not have. If we were limited to sight, hearing, smell, and taste, we should never have any idea of external objects, for such sensations are purely subjective. But the perception of solidity is immediately attached to solid objects, first to one's own body and later to objects in space that can be perceived as not part of our souls. First, we perceive that parts of our body are different from our hands, which in turn are different from whatever part of the body they are touching. If we press a hand against our chest, we are bound to feel the difference between the hand and the chest, especially if one is cold and the other warm. But though one then has the perception of two bodies, one does not as yet realize that all the different parts of one's body which the hands touch form one single body. To get this perception, one must run the hand over an area of one's body continuously; and, since a person is identical with each sensation which he is experiencing, until he has formed an idea of himself as distinct from his sensations, our imaginary man will have to experience a continuity of tactile sensations in his body to be able to judge it as one and as his own. As long as we confine our tactile sensations to our own body, we will have no idea of external objects; but, the moment we touch a foreign body, we feel a sensation in our hand but not in the foreign body. We thus awake to the fact of the separateness between ourselves and other things.

This argument is interesting in that it does not involve interferences either from causation or from God's veracity. It is based entirely on the primitive sensation of touch and the ability to move. That is, touch itself reveals the externality of material objects, reveals it through the perceptual differences experienced. Condillac does not deny that these sensations are equally subjective, but does assert that they inevitably produce different judgments. He also grants that the statue would not be able to have practical knowledge on this shaky basis. Until it has acquired language, it will be unable to form general ideas. Its knowledge is purely "instinctive." All it knows is that external objects are not part of its body. It was to remain for Destutt de Tracy and Maine de Biran to extend this argument.

2. Destutt de Tracy, Cabanis, and Laromiguière

The first important additions to the theory of Condillac were made by Destutt de Tracy (1754–1836) in his *Elements of Ideology*.[5] Ideology was the name of a new science which was supposed to consist in the analysis of ideas and to replace classical logic. But whereas Condillac had preserved the human soul as an irreducible component of human nature, Destutt de Tracy maintains that ideology is a part of zoology (*ed. cit.,* xiii). It may be given three names: it is called general grammar when one studies the means used, logic if one considers the end, and ideology if one considers the subject matter as a whole (*ibid.,* 5, note 1). Its zoological nature appears in Destutt's remark that our intellectual powers increase with our physical; that sensibility and memory—of sensations—develop before judgment; and that all intellectual faculties, like physical faculties, are strengthened by exercise, grow weak from neglect, and may lose their power when abused. This is an intimation on his part that the analogy between physiological and psychological functions is close. But whereas he will simply state the analogy and utilize only one feature of it: the basic nature of sensations, his alter ego, Cabanis, was to develop the others in his major work on the relations of the mind and the body which will not be discussed here at length.

All thinking reduces to feeling (*sentir*): feelings of relationship in judgment, feelings of past experiences in memory, feelings of desire in will; for Destutt uses the word *thinking* as Descartes did to name all psychological processes. The word "feeling," however, does not mean sensations, such as ordinary sensory data: colors, sounds, smells; but any immediate apprehension, be it a relation, or a desire, or an image, or even, as we have seen, a past event. To assert that one can immediately apprehend relations was to deny one of the fundamental tenets of the Platonistic and Rousseauistic schools. Relations, it will be recalled, could not be immediately perceived since their nature was such that they could correspond to no physical object or group of physical objects. They are something which subsists between objects and are known only when the mind by its own activity asserts them through comparison. This thesis, which was reasserted by Kant, remained current in nineteenth-century idealism.[6] Hence the assertion that relations could be grasped in the same way as their terms are grasped was novel. These apprehensions or feelings are called *ideas* by Destutt and he vigorously denies that they are images or representations of anything whatsoever. There are four kinds of ideas: (1) sensations, which are presumably always dated in the present; (2) memories, which are obviously of past events; (3) judgments, which are apprehensions of relations; (4) desires. These are the sum total of all thinking. Unfortunately for the elegance of the theory, one cannot feel anything yesterday or tomorrow; one feels things today, now. Even memories, though they refer to the past, are present to one whenever one experiences them. Moreover, if ideas do not represent things of which they are the ideas, then what does it mean to have a memory of a past event? And how could one verify an idea, assuming that ideas can be true or false?

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[5] The first volume of this came out separately in 1801, the whole work in 1804. It is the latter which we use: *Elémens d'Idéologie* (An XIII [1804]).

The four senses of sight, hearing, taste, and smell are determined by the nerves terminating in the appropriate organs, which nerves carry specific currents to the brain. But the fifth sense—touch—is, as in Condillac, of a peculiar nature. There is no one organ of touch; the tactile nerves are throughout the surface of the body. Moreover, though Destutt says that he will not demonstrate the point, all the sense organs are a species of touch, by which he means that no sense organ will produce a sensation unless it is in contact with a physical object in the external world. Besides the external sensations we obviously have internal as well: those of internal pains, nausea, headaches, and the like. They are not attached to any one organ. "In any event as soon as any one of our nerves is stimulated, be it due to the effect of a vital movement or produced by an outside cause, a sensation is occasioned and our sensibility activated" (*Ideology, ed. cit.,* 36).

Now, if we are aware exclusively of our own feelings and if all our ideas are composed of them, the question is bound to arise for Destutt, as it did for Berkeley, of what reason we have to believe in any external reality independent of our minds. "A sensation," he says (*ibid.,* 113), "is a manner of existing, a manner of being and nothing more." Furthermore, no matter how diverse and how complicated our sensations may be, they are modifications of our own being and occur uniquely in us. The same thing is true of our memories, the relations that we perceive, and our desires. Why then should we have any idea of an external world? We do have such an idea unquestionably. But are there actually existent things and how do we know it? We discover the existence of external bodies by the resistance which they offer to our will. We have the double experience of being acted upon—that is, having sensations, which gives us an idea of our own existence; and of acting, when one feels that one wills something, acts in consequence of that volition, "and experiences a *resistance* to that *felt and willed action*" (*ibid.*, 145). Then one is not only certain of one's own existence but also of something which is not oneself. For one can identify oneself with the will but not with that which opposes the will. For that would be self-contradictory. Thus the will is responsible for our knowledge of an external world and, unless we act upon our desires, we shall be aware only of our own existence. But so far he has, at most, proved only that something that resists our will exists. What it is, other than a resisting something, is not clear. For all its properties are known to us only through the sensations which they arouse in us. And those sensations are, he repeatedly says, modifications of our own being. The introduction of this bit of activity was a turning point in the history of French sensationalism. For the successors of Destutt began to speculate upon the nature of this power which distinguished us from the rest of creation and which informed us of the existence of matter. If will is but the feeling of a desire, and all feelings are passively produced in us, then why are we more active when we attempt to realize our desires than in any other experience?

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[6] One of its best known appearances is in Bradley's *Appearance and Reality,* in which their subjectivity is inferred on the ground that their objectivity would involve an infinite regress. For there would have to be a relation relating a given relation to its term, and a third relating that one to its relations, and so on.

We have said that so far Destutt leaves us with a material world whose only character is resistance to our acts. All the other properties of matter must be inferred from this one. Resistance is the force of inertia and inertia can only be discovered through motion (*ibid.*, 166). We can infer also that bodies can impel other bodies to move, and that trait of setting in motion other bodies he calls the force of impulsion (*ibid.*, 169). Since we too can move and can pass our hands over material objects which resist our movements, we can attribute extension to such objects (*ibid.*, 172). From extension we can derive the properties of being divisible, of having a certain form, and of being impenetrable (*ibid.*, 177). But there is no need to continue the argument beyond this point. For we are trying to show Destutt's method of constructing an external world out of our own sensations. And I should imagine that by now it is clear that the method would be a failure if we did not also know the laws of logic. From the simple feeling of resistance we could infer nothing except that we are having a sensation of what is called resistance. From the desire to act and the feeling of being impeded in our acts we might simply conclude that we were frustrated. But to conclude that there is something to frustrate us is first to assume as an axiom that one cannot both will to do something and will to be prevented from doing it at the same time. Modern psychiatrists would deny this; and Fichte, at about the same time that Destutt was maintaining it, saw the will as precisely that being which willed to create its own obstacles. But whether he or the psychiatrists are right or not is of no importance; what is of importance is that we have to introduce a logical principle into our complex of sensations to make the demonstration telling. And where would such a logical principle come from on the very bases laid down by Ideology itself?

Destutt de Tracy also continues Condillac's theory of habit, though he makes it more precise and explicit. He points out that any act when repeated may become habitual, that habitual acts become easier and more rapid, "but everyone has not noticed that the more a movement is easy and rapid, the less it is felt, so that often it ends by giving rise to no sensation whatever by being quite unperceived" (*ibid.,* 273). It is true that the drop of habitual action from the level of awareness to that of unawareness was not utilized by his predecessors to any extent. Destutt also points out that the details of habitual movements drop out of consciousness even though, when the habit is being acquired, one has to learn all the details painfully one by one (*ibid.,* 274). Thus habit suffices to account for the rapidity of some of our judgments which we think are self-evident and unanalyzable. In the same way we lose sight of the sensory origin of our faculties as a group. Here Destutt, not without justification, turns away from introspection to causal explanation. He hopes by this means to explain immediate judgments, instinctive behavior, and whatever other operations of the human being that do not seem at first glance to be derivative from sensation. He has to assume that men live in time and that certain experiences can be repeated. Whether he should assume this when he has already maintained that we know nothing but sensations is doubtful. If, however, he is allowed this, and if he is also allowed to apply to his epistemology what he knows of psychology—or zoology—then it must be granted that he has constructed an interesting and telling proof of the transformation of sensations into ideas and mental operations. In 1803 Maine de Biran was awarded a prize by the *Institut* for a memoir on *The Influence of Habit on the Faculty of Thinking* in which he developed the theory still further. Its contents will be discussed below.

The sensationalism of Destutt de Tracy was supplemented by his friend Cabanis (1757–1808). His extensive *Psychophysical Relations in Man*[7] attempts to show the physiological side of all our mental life, for he states that the physical and the mental are the same thing considered from special points of view. If all ideas come from sensation, a notion which he traces back to Locke, then sense organs are the physical equivalent of sensations. The sense organs vary among individuals according to sex and "temperament," in the same individual according to age or health, in all according to climate and one's mode of living. This sort of discussion had been anticipated by La Mettrie, but Cabanis did not use it to prove that man was nothing more than a machine. He wanted to show the physiological determinants of all ideas so that an antagonist who might want to substantiate the influence of ideas on conduct might be answered in advance. Like Condillac and Destutt, he felt that general ideas had no relevance beyond the particular elements of which they were composed and that the whole duty of the philosopher was to decompose them. It must be remembered that certain abstract ideas were very powerful at that time, such ideas as those of the virtues and vices; certain political ideas such as sovereignty and authority; and, needless to say, many religious ideas. If these could be decomposed into sets of sensations which arose because of our age, health, sex, temperament, diet, and so on, then our physical life might be seen to be more important than our mental. Though Cabanis maintained that the brain secretes thought as the liver secretes bile, he himself engaged in scientific work which he presumably believed to be of value. But the value of the brain's activity was biological, and he was one of the first writers to give a purely utilitarian value to thinking. Schopenhauer, as we shall see, was impressed by this and turned it by a curious feat of legerdemain into a metaphysical principle.[8]

A more interesting development of Destutt's theory was given by

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[7] *Rapports du physique et du moral de l'Homme* (An X [1802]).

[8] By temperament Cabanis was referring to the psychological concomitants of the humors: melancholic, sanguine, choleric, and phlegmatic. Even this ancient theory resulted in an epistemology which no one, to my knowledge, expanded; namely, an epistemology according to which truth would vary according to one's humor and no one could escape the determination of his temperament. If the melancholy man is given over to such subjects as mathematics and philosophy, it may well have been because the sanguine man had no ideas arising from the same kind of sensation which the melancholy man had. What sensations then would be overindividual in their relevance? But, it goes without saying, all this is fantasy on my part.

Laromiguière (1756–1837). He, too, was worried by the problem of activity. If man's mind was exclusively filled with the products of sensation, then how could one give any meaning to the difference between seeing and looking, hearing and listening? What do we mean when we speak of turning our attention to something? Is our attention turned by forces over which we have no control? He admitted that he could not define activity; to him it was a primitive idea. But he inferred that one was passive in sensation, active in attention, since sensations came into our minds willy-nilly, whereas attention depends on the individual's giving it or not. Assuming that the meaning of the two terms is known, the target of the argument is the transformation of something passive into something active. How could one define *loving* as a form of *being loved,* or *listening* as a form of *hearing?* Yet this transformation, which seemed impossible to Laromiguière, was necessary if the fundamental thesis of the Ideologists was to be maintained. For in the drive to eliminate innate ideas they had also got rid of the agent of knowledge and had nothing left but its contents. These, however, came into the mind from the outside material world, and the mind as an agent had nothing whatsoever to do. Laromiguière felt strongly the need of reinstating an active mind which could do the thinking, feeling, desiring, willing, could judge, give assent, or refuse it. Verbally, it is true, one cannot construct the active voice out of the passive. Does the sentence "Abraham Lincoln was shot by Wilkes Booth" mean precisely the same thing as "Wilkes Booth shot Abraham Lincoln"? The two facts expressed by these sentences would seem to be identical in that both sentences would be verified by the same evidence. But to be shot is not identical with shooting and consequently some philosophers would say that the meanings of the two sentences are different. Laromiguière is one who would take this position, and his importance as a teacher of philosophy was his emphasis upon the difference. We shall see that the Scottish School of philosophers took a similar position when they maintained that in all perception there is not merely the object perceived but also an act of perceiving which cannot be separated from the total complex of knowing but whose existence we must assert for theoretical reasons. It was this center of activity which was to provide the focus of Maine de Biran's philosophy.

3. Maine de Biran

Though Maine de Biran (1766–1824) began as a disciple of the Ideologists, he ended as the founder of a radically new school of

French philosophy, usually named by those historians who are fond of school names spiritualism. The development of his thought was orderly and conscious. His central problem was the same as that of Laromiguière, the significance of the mind's activity. Significance is one of those concepts which is often left vague, but in this place we are using it to name that uneasy feeling which philosophers have that something is not what it has traditionally been explained as being, that it may involve new truths which would contradict those which have been too docilely accepted, that it may be the nucleus of a new system and its traits more extensive than the area delimited by its own being, that it may, like the primordial substances of the pre-Socratics, suggest laws in its own behavior which can be applied to the behavior of the world as a whole.

Biran began his published works with his prize essay on the influence of habit, to which we have referred before.[9] He disclaims any intention of penetrating into first causes, "which can never become for man objects of *knowledge*" (*ed. cit.*, 52), or of attempting to explain the nature of forces. He is, on the contrary, to attempt the unification of ideology and physiology and to do so without ever going beyond the facts of experience and observation. The ideology he was to derive from Condillac and Destutt de Tracy, the physiology from Bonnet.[10]

Biran's premises at this time are as follows:

1. The universal source of all the contents of thought—which means consciousness—is sensation, which he prefers to call impressions. By now this should require no further amplification.

2. But all impressions must be distinguished as either active or passive. The experience of a pain, of some internal movements, of well-being or uneasiness, of heat or cold, in short, all somatic sensations are passive. These experiences arise involuntarily and the conscious subject has no reason to believe that he is responsible for them. Who this conscious subject is he does not say as yet. He

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[9] *The Influence of Habit on the Faculty of Thinking* was translated into English for the first time by Margaret Boehm, as Volume III of the Psychological Classics, edited by the late Knight Dunlap (Baltimore: William & Wilkins Co., 1929). We shall quote from this translation.

[10] Bonnet (1720–93) was a Swiss physiologist whose *Essai de Psychologie* (1754) suggested that since all sensations depend on nervous currents and since habit is repetition, the repetition of the nervous current reduces resistance to it, thus producing that facility and rapidity of which Condillac also spoke. The repetition somehow changes the molecular structure of the nerve, and this change is fortified by continued repetition. Thus physiological habits are established which are the sources of our tastes, our inclinations, our manners, and our characters. As the soul seeks pleasure and avoids pain, is pleased by the facile and avoids the difficult, it seeks those "dispositions" to which it is accustomed and consequently our physiological habits are confirmed by our souls.

assumes that his readers will allow him the right to use personal pronouns without objection. Active experiences are primarily discovered in motion. That they are active is shown by introspection. One justification for this was the established principle that in purely sensory experience there is no conscious distinction between the ego and the sensation. When Condillac granted his statue its first odor, he pointed out that the statue was to all intents and purposes nothing but the odor that it was perceiving. But movements initiated by an individual are different. "When I move, my being is extended outward; but, always present to itself, it recovers itself, it apprehends itself successively. . . . Each movement, each step made, is a very distinct modification which affects me doubly—by itself and by the act which determines it. It is *I* who move, or who *wish* to move, and it is also *I* who am moved" (*ibid.,* 55). Self-awareness, then, first arises in the awareness of volition. This perception is found in effort, and effort has to be exerted only when a movement is frustrated. Furthermore, since one cannot simply exert effort in a vacuum, there has always to be an obstacle against which the effort is being exerted, which resists effort. The vividness of the objects of perception depends on the amount of effort exerted and, reciprocally, as effort is lessened, so is the vividness of the perception. No awareness whatsoever would exist if there were no effort at all, whether awareness is of sensory qualities or of motions. Consequently Biran departs more widely from his masters than might appear from his opening sentences.

The repetition of passive sensations establishes the habit of perceiving the same qualities, but sometimes the qualities grow weaker and some tend to disappear altogether, whereas others grow more distinct. An exposure to the same degree of temperature, to the same odor, to the same taste, will cause these impressions to grow weaker (*ibid.,* 87). To use an example of our own, we might cite the case of a clock whose ticks pass out of consciousness after a few moments or that of a closed room the odor of which seems strong when we enter it but which again after a short time seems to disappear. The weight of our clothes would be a third example. Nowadays psychologists explain this on the basis of fatigue or adaptation, as the case may be. But, on the other hand, visual impressions and all others that become sharper through repetition depend on motions and hence are not purely passive. The original sensory effect will grow less, but the motions involved will grow easier, and finally associations with other motions will be increasingly set up (*ibid.,* 101). But since habitual motions, like all habitual operations, tend to be unconscious, we are not aware of the active role which we play in looking, listening, tasting, and so on. An example is found in the person beginning to play a violin. Since he is busy placing his fingers and his bow, he is unaware of the sounds which his instrument is giving forth. "The movements of the tactile organ becoming extremely easy through repetition, the muscular effort disappears or is no longer felt except in its product, *external resistance.* Therefore, it is this which will henceforth attract his whole attention. Soon the individual, mistaking his own activity, will transfer it entirely to the object, or *resistant term;* will attribute to it the absolute qualities of inertia, solidity, weight. He will even be induced, furthermore, to consider resistance as subsisting outside of him by itself, as he finds it always invariable in the midst of all the other fleeting modifications which he attributes to himself and of which he feels himself to be the subject" (*ibid.,* 105).

The transfer of one's own activity to the object was to become a cardinal principle of Biran's later philosophy. That he appreciated its importance even in this early work appears from a quotation from Bacon with which he heads his chapter on associated perceptions and the diverse habitual judgments which result from them. This quotation in English reads, "All perceptions, whether of the senses or of the mind, are based on the analogy of man, not on that of the universe"—i.e., they are subjective—"and it is the human intellect like a mirror of unequal radii which mingles its nature with the nature of things and distorts and infects it." In this way we project into the nature of the universe our own volition, our own activity, our own mobility (*ibid.,* 119). This is confirmed by habit through which we lose sight of the original nature of our impressions and, above all, of their belonging to us. And since we begin early in life to use signs in place of things, though the signs may be simply our own conventional artifacts, we tend to think that the signs stand for external objects rather than for modifications of our own being. We mix imagination with perception and when we have become accustomed to certain regular series of experiences, we imagine that the regular series is a law of nature—the Humian principle. Such habits may be maleficent since they lead us into error. They also create vague ideas, such as that of substances and essences; reify abstract nouns; and, unless corrected by careful attention, even induce us to enter metaphysics. Such a fate is too horrible to be contemplated by Biran with equanimity.

In this early memoir, then, Biran introduces the factor of effort which reveals to the individual his will and justifies his belief in an external world. His next step was taken, in 1803, in a memoir on the decomposition of thought. The question put to him was that of how thought should be decomposed and what elements should be found in it. He had in his first memoir distinguished between active and passive elements and now proposed to give an introspective account of the active. He then discovered that sensations were not sufficient to construct thoughts and that "an actual exercise of an organic instrument was needed." The will alone can cause movements in the individual and reveals, as it did in the first memoir, his ego. But now he adds that all movement which is not caused by another movement must come into being through a spontaneous voluntary act. He extends the principle to include the universe as a whole and attributes all motion to a cosmic will. And when asked for evidence, he cites immediate intuition. It is easy to see the affiliation of both his method and his conclusion with those of the Savoyard Vicar.[11] The primitive fact of knowledge turned out to be no longer sensations, but a peculiar intuition of one's own activity, exercised by the ego, and entirely *sui generis.* This is an inescapable discovery if one is willing to make it. But Biran still, according to his friend Ampère,[12] identified the feeling of effort with muscular sensations. But bit by bit he turned his attention more exclusively to this peculiar intuition of the ego and to interpreting the categories of existence in egoistic terms. He had already suggested that we project certain of our own traits into nature, but at that time he believed this to be a mistake. Now, however, he finds that the projection is legitimate and inevitable. In his unfinished *Fondements de la Psychologie* he gives a list of these categories. They are substance, cause or force, unity, and identity. The mind discovers its own durable, self-identical, unified, and energetic character by intuition and then uses these categories to construct a world. He does not tell us how this is done or why, when it is done, the world should be amenable to interpretation in egoistic terms. We intuit ourselves as substances and might well be suspected for that reason alone of treating the world as if it too were a substance. But we also intuit ourselves as suffering and do not project that experience into the external world. Is the difference the permanence of the former intuition and the impermanence of the latter? Is he speaking only of the influence of Bacon's Idols of the Tribe? But the Idols could be eliminated, and had to be if man were to attain to a proper method of studying nature. In Kant, who, as we shall see, also found us projecting human ways of thinking into the world, the categories of the understanding are not properties of the ego itself except in the sense that they are the universal ways in which the human mind is forced to reason when it reasons scientifically. But they are not a mirroring of the mind's own inherent characters.

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[11] In my *French Philosophies of the Romantic Period* (Baltimore: Johns Hopkins Press, 1925), p. 51, note 35, and p. 52, note 36, I have sketched the possibility of Kantian as well as Rousseauistic influence on Biran.

[12] See *Philosophie des Deux Ampère* (2d ed.; 1870), p. 200.

In his journal, in 1816, Biran showed certain misgivings about his procedure. He admitted that there was "an abyss" between the individual's feeling of his own causal power and his belief in universally necessary causality. He may say, "I am not the cause of this particular passively received sensation"; but neither analysis nor induction can lead one to infer "There is necessarily a cause of everything which takes place outside of me." He is, of course, quite right and, as we said in discussing Destutt's proof of the existence of external causes, he should have seen his error when he was committing it. The abyss that he had discovered between his intuitions and the false deductions which he made from them, led him to scrutinize more carefully his inner life. He has a greater feeling of freedom as he listens to his inner sense and begins to wonder whether the will does not have simply the effect of removing the obstacles to the intuition of the spirit.

By 1816 he admitted his break with Ideology. He disavowed his first memoir and began to strive toward the completion of a philosophy in which the will would be spontaneous and free. If effort arises from the personal center—the will—then the person is alone responsible for his acts and his will rises above the domain of the reason. At the same time the identification of the ego and the will puts human personality upon an ineffable plane. To know the ego, one must be it. Only a mystic union will produce self-knowledge, for only a mystic union will produce any knowledge of the suprarational.[13] But Biran is not satisfied with self-knowledge. His penetration into his will shows him that we progress spiritually in three stages: first, man is nothing for himself and everything for his fellows; second, he becomes separated from the external world in order to judge it; third, both the external world and self-interest drop out and God becomes the object of man's thought. In the third stage the two extremes meet. In the first and lowest stage there is no effort, for man is lost in the passivity of impressions, and since there is no effort, there is no ego. In the highest stage, there is no effort, for effort and consequently the ego are lost in the person of God. The language is not that of traditional religious mysticism, but the thought behind it is one with that of all mystics. For his last description of effort is that of the soul's longing for union with God. There are one or two points of interest here which should be briefly made.

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[13] Note how a similar argument was to be used later by Bergson in regard to the vital. Reason, he maintained, can deal only with the material and mechanical, that which is susceptible of analytical treatment. Therefore there must be another cognitive instrument for knowing that which is nonmechanical and immaterial and which analysis would kill. This instrument, as we shall see later on, is intuition, which requires the subject's "entering into" his objects.

First, it should be noted that the passage of the ego from consciousness to unconsciousness through an intermediate state of awareness is analogous to the passage of the mind from passively received impressions to unconsciousness through habit. Even in his first memoir he had described this evolution, had clearly pointed out that habit, however regrettable in its effects on thinking, dulled self-consciousness by decreasing effort. If a man's mind were completely dominated by habit, it would cease to be active, in the sense that, though it might repeat all the operations which it had already learned, it could never acquire new operations. But in his final and mystical period Biran wants to lose himself, to feel no need for further effort, to drown his personal will in the will of God. Second, though he had taken as his earliest problem the extent of the soul's activity, in which he followed along with other members of the Ideological school, and though in his early and middle period he seemed to be on the road which might lead either to Fichte or to Schopenhauer, repose seems better to him in the end than activity. We can follow much of this in his diary and correspondence, but one cannot help wondering whether the example of that great will which was incarnate in Napoleon was not too distressing to a retiring and peaceable soul like Maine de Biran. A generation had seen its fill of activity, of effort, of power, of conquest, of domination, and though it could no longer believe that a man was simply the product of sensory nerve currents, it could legitimately ask whether all this striving was leading to anything worth striving for. Contemporaneously with Biran, German romantic philosophers were eulogizing striving for striving's sake, longing for longing's sake. Biran, in opposition to these philosophers, strove for peace and found it only in the loss of self which was the goal of man's efforts. Third, the development of Biran's philosophy is an excellent example of the drama of meditation in which a central theme works itself out to its own undoing. This, which was the burden of Hegel's *Phenomenology,* though it goes without saying that there was no historical link between the two men, is a curious reflection of historical events through which Biran was living. If ever a case could be made out for history's reflecting itself in an individual's thoughts, this is it. The French Revolution began as an effort on the part of the Three Estates to reform the absolute monarchy by introducing a constitution. It proceeded through regicide to the Terror which liquidated the very men who had been responsible for initiating the Revolution; from the anarchy of the Terror through the Consulate to the Empire; from the Empire back to the *Ancien Régime.* Every step in this series of events looked like—or could be seen as—self-destruction through stubborn self-assertion. Again, one could think of the first revolutionists as men striving for reforms which they were taking over from England and which were analogous to the impressions made by the external world upon the internal reason. In simpler language, the first reformers had a program of which they were clearly conscious. But gradually the impetus—or, in Biranian language, the effort—gained momentum; the plan was lost sight of; and revolution for revolution's sake, each new government becoming the victim of rebellious subjects, was the only program which a reflective man could perceive. But, where there is aimless rebellion, it is always easy for a strong will to take over, and the general will becomes incarnated in a despot who then subordinates all other wills to his own. The people lose whatever sovereignty they may once have had and have to content themselves with merging with the despot's will. What had been their primitive desire is turned into its very opposite and rebellion changes into resignation, self-assertion into self-abnegation. Though Biran may never have envisioned current history in this way, the possibility of so envisioning it was realized in his successors, stimulated not by him but by Hegel. Finally, the interpretation of the human ego as effort was the beginning in French philosophy of one side of Existentialism. I refer to that side which insists that the human being is self-creative. After a long tradition that made man almost completely dependent upon the outside world for all the content of his mind and which subordinated his will to influences over which he had no control, Biran suggested the possibility of a man's determining his own life. He gave, it is true, a single goal for human striving and thus a pattern of effort which was not to be modified by the individual. But decision of conforming to the pattern rested entirely on the individual and was to be made by a free choice. It was moreover a choice which required a critical rejection of the world of habit, and just as recent existentialists have admitted the absurdity—by which they mean the irrationality—of the existent thing, so he rejected the reason's arbitration in the making of the final choice. Biran's intuition was called suprarational by him; but it was a decision which might have been called unmotivated or infrarational or nonrational just as well. None of this must be taken to mean that I am tracing Sartre back to Biran; I am simply pointing out that he could have found his start in Biran, as well as in Kierkegaard, and certainly much more reasonably than in Marx.

We have, however, situated Biran in this chapter as the last of the Ideologists, choosing to interpret him as the outcome of a tradition rather than as the start of one. It was fashionable for some time for French philosophers, like Cousin, to insist that their roots were in Maine de Biran. One suspects that this was simply an attempt on their part to exploit their national pride. As for Cousin himself, he had roots wherever he could find sustenance. Ravaisson could with more reason claim Biran as his master. But that chapter of French thought will be discussed below.[14]

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[14] Further details of the history of ideology will be found in my *French Philosophies of the Romantic Period,* ch. ii.

CHAPTER 13

The Scottish School of Common Sense

HUME'S *Treatise* was published between 1737 and 1739, thus preceding the publication of the *Encyclopedia,* the *Esprit des Lois,* Rousseau's two *Discourses,* Condillac's two volumes on epistemology, and indeed most of the works characteristic of the Enlightenment by several years. Its conclusion was general scepticism about our knowledge of causality and of the self, as we have seen, and by inference about the possibility of knowing a world external to and independent of our minds. Solipsism, though a logical consequence of Hume's assumptions, and possibly of Descartes' as well, seemed unsatisfactory to all philosophers, and from Hume's day to ours attempts have been made to escape from it while retaining the assumptions which made it inevitable. The attempt in France to establish a real external world as an explanation for our feelings of resistance gave to a feeling evidential value which no feeling could have and surreptitiously introduced logical principles for which there was no support in the system itself. Its development in Maine de Biran ended in mysticism. Rousseau's attempt to prove God, freedom, and immortality by the testimony of *sentiment* required the analytical preparations of a Kant before it could eventuate in a philosophy that less rhapsodical minds would accept. Descartes' earlier evasion of the problem through belief in God's unwillingness to deceive His children pleased few philosophers, since on that basis any naive idea could be substantiated. But one possibility remained which had not been explored: a re-examination of perception to see precisely what was involved in it. This was the work of Thomas Reid (1710–96).

1. REID

The book of Reid's which is of greatest interest at the present time is his well-known *Essays on the Intellectual Powers of Man,* published in 1785.[1] In this work he boldly attacks the assumption that all the objects of knowledge are ideas. He opens his book with an "explication of words," which indicates his assumptions. Since it is always important to know what a philosopher takes for granted, it may be useful to point out what these assumptions are.

1. In accordance with most of his contemporaries, he first assumes the necessity of an agent in all acts. This is not proved for the simple reason that it seemed self-evident. If there is thinking, remembering, reasoning, and willing, there must be something to do the thinking, remembering, reasoning, and willing. This agent is "the mind." That each of these operations might go on without an agent simply by a self-propelling process, one stage inducing the next, does not occur to him any more than it had occurred to Descartes. Whether this assumption seems proper or not, it is clear that if one uses it in an attack on Hume, the attack is prejudiced from the start. For in Hume there was no such agent.

2. He also assumes, taking this over from current beliefs, that matter is incapable of operations; it is capable of being acted upon but not of acting; it is a "dead, inactive thing which moves only as it is moved, and acts only by being acted upon" (*ibid.*, 5). The mind, however, has just the opposite properties; it is essentially active; "everything we know of it implies life and active energy" (*ibid.*). He admits that this distinction is assumed by him and assumed because most people hold to it. They and he may be wrong, but a person who assumes that the mind is not active—and one might add that matter is not inert—may also be wrong. It appears thus at the start of his inquiry that the correct way of philosophizing is to begin with common sense.

3. On the basis of the subject-attribute relations, he assumes that only those attributes which cannot exist independently of a subject may be said to be "in" that subject. This assumption may be paraphrased, I think, as follows: there are certain beings which we name by adjectives, not nouns. Adjectival beings, *red, loud, good, wise,* cannot exist independently of that thing which they qualify, the apple which is red, the noise which is loud, the man who is good, the philosopher who is wise. In the case of the mind, we must always distinguish between those properties named by adjectives which can qualify the mind and those which cannot. We can speak of a rational or impulsive mind but we cannot speak of a red or

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[1] I quote from the edition abridged by A. D. Woozley (London: The Macmillan Co., 1941) as it is more accessible than the early editions. The abridgment makes the argument clearer and Mr. Woozley has left out nothing germane to it. The editor's introduction is recommended to all our contemporaries who participate in the almost general neglect of Reid.

square mind. Therefore, rationality and impulsiveness may be said to be in the mind, but not redness or squareness. Now if one says, as Locke, Berkeley, and Hume had said, that redness and squareness are perceived as ideas, then one has to show in what sense colors and shapes can be properties of a mind, or in Reid's more technical language, attributes of which the mind is the subject. This is the only sense of the preposition "in" that Reid will accept as reasonable.

4. Reid makes a sharp distinction between perceiving and conceiving or imagining. Perceiving always has an existing thing as its object; conceiving and imagining may have fictitious and non-existent objects, winged horses or gold mountains. In the second place, one can perceive only external things, not things in the mind, trees in space, but not pains or pleasures. The latter are felt, not perceived. Third, the object of perception must always be present, not past, so that perception and memory cannot be identical. A philosopher may use terms as he wishes, and Reid wishes to use them as common sense uses them. But again his assumption leads him to a refutation of Hume by fiat. Hume had considered what one is aware of in memory, in imagination, and in wide-awake perception, and could find in them all only a difference of vivacity or clearness. If a tree that is being seen now differs from a tree that I remember or am simply thinking about only in the clearness with which I "see" it, then the name given to the operation by means of which I see it should be of no more importance than the time of day or the day of the week on which I see it. But Reid is not so childish as to think that such verbal distinctions by themselves could be evidence of real distinctions. And he was to use the idea of perception as an operation of apprehending existent, external, and present objects as a cardinal part of his epistemology. By making the verbal distinctions he was challenging his opponents to show why they were not real. The empirical fact that an imaginary tree looks just like a real tree, except that it is not so bright, is no proof to Reid that imagining and perceiving are the same operation. Common sense says that they are not; the philosopher should show that common sense is wrong or accept it.

5. Reid assumes that there is a real distinction to be made between "simple apprehension which implies no judgment at all" (*ibid.*, 10) and judgment or opinion. His example runs, "I conceive an Egyptian pyramid," which implies no judgment, and "I conceive the Egyptian pyramids to be the most ancient monuments of human art," which does. The former has for its objects things, the latter,

propositions. Clearly, only the latter may be true or false. The technique of Reid's opponents was to assume that a set of elementary propositions could be constructed in one-to-one correspondence with a set of immediate apprehensions and that in this way all knowledge could be reduced to simple apprehensions. It is possible that, as the Ideologists argued, habit would establish a set of judgments upon repeated simple apprehensions, but on the other hand it is obvious that there are a variety of simple judgments which may be made about or verified by a single simple apprehension. Reid, however, is indicating verbal distinctions which he thinks should be taken seriously until reason has been given to abandon them. Therefore in his case the distinction is assumed and not demonstrated.

6. He also assumes that in any mental operation three elements can be found through analysis: the mind which performs the operation, the object of the operation, and the operation itself. This idea is expressed, he says (*ibid.,* 11), in all languages where we find subjects in the nominative case, transitive verbs, and objects in the accusative. Again, he does not deny the philosopher the right to show that language makes unreal distinctions. But we must not start by extinguishing "the old light of common sense," and, like Vico, Reid proclaims his belief that "no instance will be found of a distinction made in all languages which has not a just foundation in nature" (*ibid.,* 12). In 1785 "all languages" meant, at most, certain Indo-European languages which naturally enough, since they all have a common source, retain common syntactical formulas. If one is going to construct the Human Mind out of linguistic practice, it would be wiser to make a comparative study of languages which are not part of the Indo-European system. One need not quarrel with the assumption that common sense is expressed in language; but what it expresses is another problem.

7. Along with these distinctions, Reid assumes that there is no necessity for introducing any *quartum quid,* an idea, to accompany the subject, operation, and object in knowing. The idea has been invented to stand for or represent the object. Since it has been held that the object of knowledge must be in the mind, and since real physical objects could not be there, something had to take their place—and that something was the idea. Ideas in this sense, he says (*ibid.,* 13), are "a mere fiction of philosophers." Reid here flatly assumes that we may have a direct perception of a physical object without the mediation of ideas. To prove this would require first a precise statement of the properties of a physical object, next a similar statement of those of whatever it is which we perceive, and

finally the discovery of whether or not the two are compatible.[2] Among these properties presumably would be position in the spatio-temporal matrix as well as sensory qualities, size, behavior, and the primary qualities of Locke. If what we immediately apprehend has properties which are not only different from those of the physical object—as we know them from physics or some other reliable source, or as we assume them to be—but also incompatible with such properties, then we can only conclude that we are not apprehending the physical object. It makes very little difference, then, whether we call what we apprehend by the name *idea* or not. If we do call it by some such name, the name will suggest a mental being and we must then show that it has the properties of other admittedly mental beings, unless there are only two kinds of beings, material and mental.

8. Harmonious with his rejection of ideas in the Lockean sense of that term is his assertion that in what he calls sensation there is no object other than the act of sensing itself. Pain and pleasure, desire and aversion are names for acts, not for objects. We may properly speak of having a painful feeling but not of having a feeling of pain. This assumption is associated with the rejection of ideas in that if there are no ideas in perception to stand for the objects perceived, so there need be none in feelings to stand for what we feel. The importance of this assumption lies in the possibility it provides for our being conscious of acts as they are being performed without turning them into things. It had been customary to believe that whatever we are aware of must be an object of some sort; but there is no a priori reason why we should not be aware of thinking, remembering, and feeling while we think, remember, and feel, and why, even while we are aware of these acts, we should not be aware of them as acts rather than as things. In our own time G. E. Moore has revived this notion of an act of perception and, for different reasons, Bergson insisted that we could intuit the passage of thinking without analyzing the process into a series of discrete states of consciousness.

The assumptions which we have just set down are all derived from linguistic custom, and if one also assumes, as Reid did, that language is codified common sense, we may say that the assumption of the reliability of common sense is prior to them all. But Reid himself acknowledged other assumptions, for those which we have listed are derived by us from his "explication of words." His acknowledged assumptions he calls axioms and they run as follows.

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[2] In case it is not obvious, an example of this technique may be found in A. C. Lovejoy's *Revolt against Dualism* (New York: W. W. Norton & Co., Inc., 1930).

1. Thinking, reasoning, and in general all mental operations of which one is conscious really exist. One's consciousness of such operations cannot be denied.

2. Memory, if recent, is veridical, though when it is of long past events, it may be doubted.

Need we point out that he has assumed here that the mind has a temporal dimension? This may not seem important, but it makes it necessary to date all objects of knowledge or acts of knowing. The problem of apprehending now what took place years ago thus arises for Reid as it does for the believer in representative ideas.

3. By attentive reflection one may become conscious of operations which normally escape one's attention. It is reflection which gives us knowledge of that which is in the mind, that is, the operations of the mind. We are more accustomed to attend to the objects of our operations and not to the operations themselves. But we must not be led astray by custom.

4. Though no proof can be given of the unity and duration of the thinking subject, our "immediate and irresistible conviction" of it justifies our belief in it (*ibid.,* 26).

5. Subjects and attributes are distinct kinds of beings. But we are conscious of and immediately perceive only attributes, not subjects. "If any man should think fit to deny that these things are qualities, or that they require any subjects, I leave him to enjoy his opinion as a man who denies first principles and is not fit to be reasoned with" (*ibid.,* 27).

6. In most operations of the mind, there is an object distinct from the operation. (He has already said that in sensation there is no object other than the process of sensation itself.)

7. The validity of common sense. "A consent of ages and nations, of the learned and vulgar, ought at least to have great authority, unless we can show some prejudice as universal as that consent is, which might be the cause of it" (*ibid.,* 28).

Though I have presented both Reid's explication of words and his first principles in separate lists and have extracted from the former his assumptions, I trust that the congruence between what he admits as his first principles and those derived from his explication of words is apparent. His repeated assertion of the identity of language and common sense and his repeated invocation of common sense to justify his various distinctions make this congruence reasonable in spite of his admitting that occasionally both language and common sense may be wrong. But unfortunately he gives us little indication of how one might prove either wrong.

Nevertheless when Reid comes to his theory of perception, he leaves common sense and language as far behind as anyone else. He tries to demonstrate that the organs of perception are only the instruments through which the mind perceives, and it surely may be doubted whether either language or common sense agrees with that. Again when he insists that we are conscious of the act of perception but not sensible of it, the distinction may be valid but is surely not one made by common sense. This may not be a matter of primary importance, but it is another example of how philosophers often overlook their basic assumptions when they come to construct their theories. In this case it was just as well that Reid did overlook them, for it is precisely in his theory of perception that he was most original and most instructive. He points to a factor of perception which, to the best of my knowledge, none of his forebears had noticed, that in every act of perception there is some conception of the object perceived (*ibid.*, 79). This had been hinted at perhaps by the English Platonists in their theory that conceptions are prior to percepts, but it was only a hint.[3] The conception which we have of external objects and our belief in their present existence are both inexplicable; but they always accompany every perception (*ibid.*, 176). One feature, then, of this conception is externality, or independence of us. Another is presumably the general class or "nature" of the thing perceived. I say "presumably" since Reid is not clear on this point. But if one takes the following statement of the situation as typical, it will become evident that Reid is arguing the necessity of our knowing what a thing is before we can believe in its real existence or reason from its occurrence or desire or shun it. The passage runs:

> It may be observed that conception enters as an ingredient in every operation of the mind. Our senses cannot give us the belief of any object without giving some conception of it at the same time. No man can either remember or reason about things of which he hath no conception. When we will to exert any of our active powers, there must be some conception of what we will do. There can be no desire or aversion, love nor hatred, without some conception of the object. We cannot feel pain without conceiving it, though we can conceive it without feeling it. These things are self-evident (*ibid.*, 230).

He does not deny that we may have simple apprehensions without concepts, but such apprehensions say nothing. To have knowledge a judgment is required, and judgments would be formless unless they asserted something. And what they assert is determined by the conceptions in accordance with which we construct them. To give an example, since Reid is chary of examples, when we have a simple apprehension of redness, we may judge that there is a rose before us. We are attributing the color to an object; we identify the object by including it in a class of things, the class of roses. But the color red is neither a rose nor a class of roses; it is just a color. The process of identification, the attribution of the color to a flower, is made by us through our powers of conception.[4] The total cognitive act includes conception as its formative principle; conception orients our judgments, determines whether we shall identify what is before us, see it as a cause of something else, or perceive its effect as real or illusory. At the same time Reid is convinced that conception by itself is empty of all content. It is neither true nor false but is that which when once filled by apprehension becomes a judgment and then can be one or the other. Though Reid has put his finger here on a factor in knowledge which Kant was to develop more fully, he admitted that he did not know how conceptions arose. In our own time Dewey has substituted questions for conceptions, and since the questions which a man asks may arise from his inarticulate needs and may vary from infancy to maturity in the same man, we have at least a hint of how identifications and similar judgments are made and how a given object need not always be judged in the same way. Condillac and his school by their insistence on the influence of habit had seen the possibility of explaining how conceptions become crystallized and compulsive so that the mature man who begins to philosophize thinks that his conceptions are rooted *in rerum natura.* But we must not attribute to Reid more than is in him, ingenious and provocative though he be.[5]

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[3] Every act of perception has two other traits: a strong conviction of the present existence of the object perceived, and the immediacy of the conviction, that is, it is not the result of reasoning. But these were commonplaces.

A short formula for Reid's epistemological doctrine would point out two essential items: (1) that the unit of knowledge is judgment, not apprehensions or conceptions, and (2) that all judgments contain a reference (a) to a permanent knowing subject, the ego, and

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[4] Readers of Kant will recognize in this a Kantian factor. Kant had a low opinion of Reid, and indeed Reid in comparison with Kant is pretty vague. But according to Woozley, Kant had never read Reid. See Woozley's introduction, *ed. cit.,* p. xiii.

[5] Though Reid is not interested in infants, brutes, or idiots, he does admit that our first notions of sensible objects are "gross and indistinct and, like the *chaos,* a *rudis indigestaque moles.*" Analysis is needed to make it distinct, and habit does have an effect in making the analysis easy. In fact, so easy that "we are apt to overlook it [i.e., the habitual analysis] and to impute the distinct notion we have formed of the object to the senses alone" (*ibid.,* 323).

(b) to a permanent world of thought. This world is organized by categories, the categories of existence, causality, and substance, and these categories are not derived from sensation but are inherent in all thinking. The evidence for this is ultimately in common sense and linguistic usage. Reid is uneasy about his concept of common sense, however much he may use it, and when he is pressed—perhaps by his conscience—he admits the vagueness of the term. In the Stoics common sense was inherent in what they called the common notions. All minds according to this doctrine had certain concepts *(logoi)* implanted in them with which alone they could reason. By a kind of anticipation, technically called a *prolepsis,* the mind organized its knowledge; there was only one way in which the mind could work and that way was common to all minds. Therefore the *consensus gentium* had to be right. If an individual mind committed errors, it must be because of his departure from the consensus. But this kind of common sense was somewhat different from Reid's. It was different in that Reid's common sense was a sort of rough statistical generalization, the modal ways of thinking. It had to be that in order to permit some minds to deviate from its teachings. Consequently Reid tries to equate common sense with that which is rational (*ibid.,* 339). The reason first has to determine what is self-evident and next to draw logical conclusions from it. As far as common sense is concerned, he limits it to the first task; the ability to perform this task is a gift of Heaven and cannot be acquired. But Reid should have known that what seemed self-evident to his opponents did not seem self-evident to him and that therefore either he or they lacked the heavenly gift. This difficulty could only be eliminated by an excess of self-approval or of disdain for his colleagues, but the canons of good behavior should not have prevented his seeing that some of the most intelligent men of his time lacked that very insight which the most uneducated were supposed to have by nature.

The principles which we know by common sense, the intuited first principles of necessary truths, run as follows. (1) The grammatical: that every adjective in a sentence must belong to some substantive and that every complete sentence must have a verb. This clearly is the assumption of substance (subject) and attribute plus transitive action. (2) The logical: that only propositions are true or false, that every proposition is either true or false, that no proposition can be both true and false at the same time, that circular reasoning proves nothing, the dictum *de omni et nullo.* (3) The mathematical: that is, the axioms of mathematics. (4) The aesthetic:

axioms of taste. (5) The moral axioms: injustice is worse than justice, generosity better than mere justice, that no blame attaches to compulsory acts, that we ought not to do to others what we believe unjust if done to us. (6) The metaphysical: "that the qualities which we perceive by our senses must have a subject which we call body, and that the thoughts we are conscious of must have a subject which we call mind" (*ibid.,* 396); that "whatever begins to exist must have a cause which produced it" (*ibid.,* 398); "that design and intelligence in the cause may be inferred, with certainty, from marks or signs of it in the effect" (*ibid.,* 402). Now Reid does not simply assert the self-evidence of these principles, though if they are grasped intuitively, assertions ought to suffice to demonstrate them. He appeals to common sense to show that all men do have these ideas. But then to show that they can come only from inherent ways of thinking, he points out that no necessary proposition could be derived from experience alone. Experience can give us a great many examples of a general proposition but it cannot equate a large number with all. It may allow us to say that in our own experience such and such has always been the case and even that we have never heard of a contrary case, but this is not equivalent to asserting that the contrary cannot occur. Hence, if such axioms cannot come from experience and if they are not innate ideas in the Platonic sense of that term, and if finally all men agree to them, they must be rooted in common sense. Their roots in common sense, moreover (*ibid.,* 401), are also demonstrated by the custom we have of utilizing them in "the practice of life." To use an anachronistic term, they work. How could they work if they were not true? Reid does not say that they are true because they work, but that they would not work if they were false.

There is thus in Reid a notion that the operations of human knowledge—and I say "human" to distinguish it from subhuman—show a parallelism with the structure and substance of the universe. But had he been of a more sceptical turn he might have argued that since the operations of the mind are universal and immutable, we should never be able to tell whether they describe the world or not. But he had no trace of scepticism in his makeup except where the opinions of his predecessors were concerned. He stood on the edge of Kant's Copernican Revolution and drew back. And yet in spite of his strange cautiousness, strange in a philosopher, his influence was greater than that of any of his contemporaries. He remains one of the most tantalizing epistemologists in the European tradition, though one of the most neglected today.

2. Dugald Stewart, Royer-Collard, and Jouffroy

The refinements made by Reid's successors in the theory of common sense modify his basic assumptions so little that we need not expound them in a study of this sort.[6] Dugald Stewart introduced the idea that the propositions known by common sense are necessary to the operations of our faculties, an idea which had been elaborated with greater precision and stronger arguments by Kant in his first *Critique.* But the question of whether these principles were necessitated by the nature of the world, or were simply Idols of the Tribe, or whether the human mind is so constructed that it will incorrigibly project its own methods of thinking into the natural world is not discussed seriously by him. The problem did not seem so pressing to men of the early nineteenth century as it does to us who have seen matter dissolving into electric charges which do not have the character of bits of impenetrable and mutually exclusive particles moving about in space and colliding like billiard balls. Common sense may be habitual ways of thinking crystallized and perpetuated in language, and the history of science and philosophy could be envisioned as the interplay between the compulsions of habit—or tradition—and actual discovery. The development of modern mathematics has given us a tool for interpreting physical events without applying words to them. If a verb demands a subject and an object, and if subjects and objects have names which are common nouns, it is bound to seem necessary that these nouns indicate permanent *things.* But there is also the possibility that things are, like Hobbes's instantaneous processes, events whose temporal dimension is very short, or cross-sections of events. Time for Reid and his school was still a sort of river down which things flowed and not an inherent dimension of the natural world. To common sense, it is true, the physical objects which surround us, whether natural or artificial, change so slowly that we have no trouble naming them and finding that the names apply with enough constancy to serve our practical purposes. The familiar objects, whether the sticks and stones of our natural environment or the furniture which philosophers are fond of using as examples of the neutrality of time, stay put and we are used to finding them where we left them, their appearance so slightly changed that we endow them with immutable characters. The Freshman in his chemistry courses knows how misleading this view of nature is, knows that the material frontiers of his objects pulsate and he also knows that though his textbooks speak of molecules and atoms as if they also were permanent things, that is simply because our language can do nothing else. At this point he turns to mathematics.

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[6] Readers who care to pursue the matter would do well to consult A. K. Rogers' *English and American Philosophy since 1800* or Henry Laurie's *Scottish Philosophy in its National Development.*

But if Stewart and the later Scots, with the exception of Hamilton, spent their time in restating the philosophy of Reid and if philosophy in England remained stagnant for a quarter of a century, the Continent was in a different situation. Reid's *Inquiry* had been translated into French as early as 1768, and though at that time it met with a reception even cooler than that given to Hume's *Treatise,* it came into its own when the statesman and philosopher Royer-Collard (1763–1845) discovered it.[7] There is a story told by Taine with his usual malice that Royer-Collard became a Reidian because he came upon a copy of the *Inquiry* on the quais and, being in need of a philosophy different from that of the Ideologists and the Traditionalists, adopted it. But Reid's philosophy was perfectly suited to the requirements of a professor of philosophy in 1812, when Napoleon looked with suspicion on all thinkers who attempted to analyze ideas. Whatever his motives may have been, it is a fact that he spent his first year of teaching by presenting Reid to his students in extracts with commentary. Though the target of Reid's attack was Hume, the target of Royer-Collard's was Condillac. If the elements of all knowledge were judgments and not sensory data, then Reid could be used to demolish Ideology as well as phenomenalism. As we shall see, on the extreme right wing was another philosophical doctrine, that espoused by Joseph de Maistre and the Vicomte de Bonald which interpreted what Reid called common sense as a God-given tradition. Where the Ideologists were thought of by the Emperor as dangerous revolutionaries, the Traditionalists seemed equally dangerous since they relegated all secular power to second place under the Pope. Their "tradition" was common sense with a religious flavor which was distasteful to Napoleon since he wanted a philosophy—if he had to have one—which would induce his subjects to submission. The common sense of Royer-Collard was secular and by following it no one would be considered subversive. It was an ideal solution of the practical problems involved in teaching a subject which had been looked upon with suspicion by all monarchs since the time of Socrates.

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[7] To one man at least, the Jesuit translator of Claude Buffier's *Traité de vérités premières* (1717), the "Transtweedian philosopher" had plagiarized Buffier. See the preface to *First Truths or the Origin of our Opinions Explained,* 1780. But a reading of Buffier will show that though he did indeed use the notion of common sense to explain our belief in general principles, the development of the idea is no more like Reid's than common sense in the Stoics.

There is little other than eloquence in Royer-Collard which was not previously in Reid.[8] He repeated the distinction between sensation and perception, the magical certitude which we have of real external objects, the common sense basis of the principles of causality and induction. He attacks with force subjectivism, as he understood it, as the source of metaphysical nihilism and ethical hedonism. Whenever he meets a difficult problem, he solves it by appealing to common sense. Common sense organizes the world into related things, explains why we believe in causation, why we seek the good and flee from the evil.

The common sense philosophy was propagated by Royer-Collard's pupil and successor, Victor Cousin, before Cousin developed his own eclectic doctrines, and also by Théodore Jouffroy (1796–1842). Jouffroy translated Reid and Dugald Stewart and in various essays applied their philosophy to scattered problems which were of interest to him. Thus he accentuated the individual's inability to reach the truth by his own efforts since it is only when he falls in with common sense that he can be sure of the results of his thinking. He is one of the first French philosophers to develop the idea of a cultural "time" which somehow or other determines the beliefs of people living in it. Discussing Voltaire in an essay on *The Sorbonne and the Philosophes* (1824),[9] he insists that neither Voltaire nor his friends were to blame for their ideas; "it is not they whom their opinions compromise but their epoch." "If Voltaire had been born fifty years earlier, it is absolutely certain that he would not have played the role he played. Perhaps, rivaling Corneille and Racine, he would have passed his life in writing tragedies; perhaps he would have been a Jesuit, *docteur en Sorbonne,* or whatever you please; but by no means a philosopher. And why? Because philosophy is the judgment of the people, and in the seventeenth century the people believed and did not judge. Thus where there is no philosophy, there can be no philosophers. Where there is no public opinion, no representatives of public opinion. All the ideas of which Voltaire and his friends are accused, Voltaire and his friends could not have had fifty years earlier; they therefore are not their ideas, but the ideas of their time. A hundred years earlier Luther would have been a saint and perhaps a pope."

Does this imply that ideas are like fashions and simply come and go without regard for their truth and falsity? Not at all. The false has never been believed by any age; all ages have believed that two and two are four. The human spirit does not travel from truth to falsity and back again, but from truth to truth. But it discovers the truth bit by bit. The process had been somewhat clarified in an interesting essay written in 1823 and printed two years later, *How Dogmas End*.[10] There he suggests that at first a dogma is accepted on the basis of what seems like sound evidence; it is then accepted on faith. The children of the first group take over the beliefs of their parents without bothering to verify them; they believe without understanding. At this point faith rests no longer on conviction but on authority and becomes a habit. "Thus transmitted from generation to generation in consecrated language, and always less understood as it is more remote from its source, the moment comes when the dogma reigns only in appearance, because all feeling for its truth has been extinguished in people's minds. Faith is only a routine followed with indifference and without anyone's knowing why. It subsists only because no one pays attention to it." At this point the critical spirit is aroused. Individuals begin to examine the dogmas and their good sense leads them to try to substantiate their beliefs, held by the force of authority. But when they carry out their intention, they discover that the truth of the dogmas had been hidden in a mass of maxims and symbols which have become empty of meaning. A new faith then is erected upon the ruins of the old, starting as a mere negation of the old. Human intelligence is awakened after centuries of sleep and the rudiments of truth are rediscovered. Their scepticism is contagious. The rulers of society can no longer substantiate their dogmas for they have forgotten what evidence originally existed to prove them. Consequently, they preach simply obedience to authority. At once a struggle arises between the spirit of criticism on the one hand and of authority on the other, with moral strength supporting the former, material power the latter. But the blood of the first martyrs begins to interest the people in the quarrel. A feeling of justice makes it seem indecent to assassinate men for having said what appears to be true and of good sense. They begin to plead their cause and to hate their persecutors. The power of public opinion makes itself felt. Truth leads to indignation. Soon indignation against the persecution wins adherents for the persecuted, then for their truth, and eventually it results in a firm new belief. The result is the adoption of the new doctrines. In this whole struggle doubt is a weapon for the truth, but once it has overthrown an old dogma, it cannot create a new one. That task is accomplished when individual after individual speaking for the people as a whole, that is, for common sense, consolidate opinion once more in favor of the truth.

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[8] A more extended discussion of his teaching will be found in my *French Philosophies of the Romantic Period.* The texts themselves can be read in Schimberg's *Les fragments philosophiques de Royer-Collard,* 1913.

[9] *Mélanges Philosophiques,* 1833, p. 30.

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[10] *Mélanges,* p. 3.

In this essay Jouffroy exhibits his belief that common sense may go underground in the face of persecution. Yet it never dies out, though it may speak only through the mouths of certain individuals. It seems impossible not to wonder why a sense, even of truth, which is lost to all but a few prophets should be called common. It would have been as reasonable to maintain that though the truth is one and eternal it is discovered by individuals in the light of what evidence they are able to use. He could have pointed out that, for instance, the physics of Aristotle was true relative to the data of dynamics at his disposal and the general intellectual matrix into which his methodological assumptions obliged him to fit them. The people as an intellectual unit are not needed, and one is forced to the conclusion that Jouffroy introduced the people because of his sentimental attachment to constitutional monarchy.

This becomes even clearer when one reads his essay on the philosophy of history.[11] For in that he attributes the changes in human affairs to the development of ideas, much in the manner of Condorcet. The fact that we change presents three problems: (1) what has been man's state from his origin to the present; (2) what has been the development of his ideas; and (3) how have historical changes in humanity come about from the development of ideas? He assumes that biologically man has not changed; in that, he is like the beasts. But whereas the beasts live as they have always lived, man has not. To relegate historical change to changes in ideas may be sound, but since ideas are part and parcel of human nature, one might also put the problem of how ideas change. If all ideas are combinations of sensory data, why should not primitive man, who presumably had the same sensory equipment that we have, have developed exactly the same ideas that we now possess? Jouffroy takes a step in the right direction when he maintains that only by untangling the laws which describe the evolution of the human mind will we have a philosophy of history. If we cannot go behind these laws, then we shall have to be satisfied with them as our ultimate explanation. But it should be observed that if such laws are ever to be found, they will in all probability be framed as laws of collective, rather than individual, thinking. That, however, would commit one to the belief in a collective mind, a belief which was not repugnant to Jouffroy nor to anyone inspired by Reid.

The development of a society's ideas progresses in the same way,

[11] *Mélanges*, p. 52.

he maintains, as that of an individual's. "Without design or goal, without research or method, a sum of ideas is acquired [by society], in virtue of which it creates for itself such and such a religion, such and such a government, such and such *mores,* such and such industry." This would look as if intellectual history went on automatically without human interference. And indeed that is Jouffroy's belief, and he extends it from specific societies to humanity in general. Whether it is a question of an individual or a society or humanity as a whole, the development is, as he says, spontaneous. The only difference is one of speed. In the case of a single man, ideas will develop within the space of a few years; in a society, the same result will take a century; in humanity as a whole, a millennium. "The reason is that human revolutions are composed of social revolutions and each of these of individual revolutions." One might have thought that a believer in common sense would reverse the order, though why common sense should ever change would remain mysterious if not inexplicable. To balance the spontaneous and uncontrollable evolution of the human mind, Jouffroy introduces another kind of evolution which is the result of reflection. The reflective man can resist automatic development and direct his curiosity upon individual problems. Such a person discovers the truth more rapidly, and as the common mind develops, he influences its development. He progresses faster than society progresses, and the interplay between his mind and that of society determines the speed of general progress. It is perhaps this factor which would have made Voltaire a Jesuit if he had lived fifty years earlier and Luther a saint or pope. The inertia of the social mind would have retarded their individual development. But at the same time "great ideas gestate for a long time in mind before they become precise; the genius is he who first brings them to light." [12]

This occult set of ideas which may permeate a society, and finally humanity as a whole, is of course common sense, and in an essay on the relation between philosophy and common sense,[13] written also in 1824, he identifies it with religion. The curious fact which gives rise to the problem of common sense is that whereas the greatest philosophical geniuses cannot agree on what is the good, the true, and the beautiful, common sense knows what they are. Common sense therefore has the answer to the problems which philosophy is seeking but which common sense has never raised. It is a philosophy which is anterior to philosophy, properly speaking. Now one might think that this anterior philosophy was a set of ideas which had once been discovered by philosophers and incorporated in tradition. But to Jouffroy it "is found spontaneously in the depths of all consciousness, independently of any scientific research." Every man becomes a philosopher without knowing it when he listens to his instinctive preferences. Jouffroy obviously is unaware of the conflicts which appear in popular thinking and like most philosophers identifies his own ideas and those of his associates with the ideas of the human race. One would not have to cross the frontiers of France even in 1824 to find the people finely divided on questions of ethics, aesthetics, and science. But I suppose that if one separates the intellectuals from the people, then there actually is a larger degree of agreement on the part of those who take over their ideas from tradition or from ecclesiastical authority or from a narrow range of reading than there is on the part of those who do independent research and write the books. To Jouffroy common sense absorbs all the differences in the philosophers in an amalgamated synthesis, whereas the philosophers insist on taking over only one of the many beliefs of common sense and systematizing all else in its terms. Thus philosophy may be materialistic or spiritualistic whereas common sense is dualistic. But even the philosopher, he says, in his practical life guides himself by the light of common sense. What then is the role he plays in society and how can it be justified?

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[12] See the very interesting essay on the present state of humanity, *De l'état actuel de l'Humanité,* in *Mélanges,* p. 101. My quotation will be found on p. 141.

[13] *Mélanges,* p. 149.

The role is that of clarifying the ideas which common sense holds obscurely, and it is justified by the need which we all have of understanding what we believe. Just as the Fathers of the Church could say, "I believe in order to understand," so the present day philosopher can say, "I try to understand what I believe." [14] The attempt to understand, one can easily see, will always be unsatisfactory to some individuals, because understanding cannot operate without making distinctions. Though these words are not Jouffroy's, one can see that we reason and have to reason by using the laws of logic. If we are going to apply the law of excluded middle to the universe as a whole, we are bound to exclude some features of it as unreal or only apparent or of some similar nature. We might, to be sure, deny the possibility of applying any single adjective to the universe as a whole and thus deny a substantial monism. But if we are willing to take things as they come, the question of unity and multiplicity will not bother us nor shall we attempt to harmonize the piecemeal judgments we make about the world. If we are faced with an

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[14] Cf. Bradley's famous *boutade,* "Metaphysics is the giving of bad reasons for what we believe on instinct."

either-or, we cannot follow common sense, for common sense accepts both alternatives. It sees without looking.[15] Therefore it absorbs all the multiplicity which is there. Philosophy looks attentively and thus cannot see everything. It selects and distinguishes the field before it. What common sense gains in extent, it loses in clarity, and the human mind wants clarity in order to understand. "Science is nothing other than the successive clarifications of the different points of that immense stock of ideas accumulated in the intelligence by the manifestation of things. That which produces this clarification is looking after seeing, in other words freedom putting a question to the understanding, asking it what it knows and forcing it to make its knowledge precise. To philosophize is to learn; to learn is not to know, it is to establish and ascertain what one already knows; and how can one wish to learn in ignorance of what one wishes to learn?" Plato had put the same question two thousand years earlier in the *Meno.*

One might imagine that a philosopher as interested in history as Jouffroy would see that both common sense and philosophy might progress as new problems arose. But he is convinced apparently that common sense has already found the answers to all questions and that the future of philosophy is to attain the same goal in its own way. When it does, the divorce between the two will come to an end. All that is required is the discovery that "it is not the intelligence which discovers reality but reality which manifests itself to the intelligence." We possess within us all that can be known, but we do not have the evidence within us of why it is true. Let us suppose, for instance, that a child is given a theorem in plane geometry to prove. He knows that it can be proved; otherwise his instructor would not give it to him. His only problem is to find the evidence for it.

In his long study on the *Organization of the Philosophic Disciplines*[16] Jouffroy gives us another version of the task of philosophy. Here he maintains that philosophy "is the science of what has not yet been able to become the subject of a science; it is the science of all those things which the intelligence has not yet been able to discover the means of knowing in their entirety; it is the rest of the total primitive science; it is the science of the obscure, the undetermined, the unknown; for it comprises objects to which these various epithets are appropriate, according as one envisions them more or less vaguely or as yet not at all." The first clause in this suggests James's famous remark that as soon as a subject becomes really known, it turns into science; until that time it is philosophy. But the rest is of course somewhat different. Philosophy here is a sort of groping toward the truth and must rely upon speculation and hints. But, he continues, the more one reflects upon the subject, the more one sees that philosophy is a peculiar union of psychology, logic, and ethics which when pursued thoroughly will generate also jurisprudence, aesthetics, the philosophy of history, and natural religion. The latter subjects, if one may judge from his writings upon them, must all be studied as dependent upon the three primary subjects. One cannot base one's philosophy either upon psychology or logic or ethics individually. Whatever one discovers about each is discovered by what one already knows of the others. In short, a philosophic discipline is one in which neither physical facts nor the laws of right reason nor human values can be excluded, whereas a nonphilosophical subject, such as physics or biology, can omit some or all of these fields. Whatever one may think of his use of this definition, it must be granted that in history philosophy has been as Jouffroy described it. One can study physiology without any reference to the human mind; but one cannot study what has been traditionally known as philosophy without studying the operations of knowing, desiring, willing, and the like. Similarly, one can study physics without inquiring into the validity or grounds of the laws of coherent thinking; one may take over logic bodily and proceed from there. But if one is going to study philosophy as it has been traditionally studied, one is forced to ask whether the laws of logic are inherent in the nature of things, whether the axioms of formal logic can be denied, whether implication is strict or material, and so on. But also one cannot forget the insistence of problems of value which are as intimately intertwined with problems of the soul and of logic as they are with it. Apparently none of these studies is totally independent of the others, though Jouffroy seems to make logic and ethics dependent upon psychology. The work, however, remained unfinished and one cannot say with assurance what would have been its outcome. Our purpose in including mention of it here is to indicate that the position which he had formerly given to common sense seems to have been changed. Nevertheless, since this work was not published until after his death and even then incompletely, it was not by it that he was known.

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[15] Here Jouffroy takes over the distinction between active and passive perception which had been developed by both Maine de Biran and Laromiguière.

[16] *De l'Organisation des sciences philosophiques,* published by Damiron in *Nouveaux Mélanges Philosophiques,* 1842.

As most people know, Scottish common sense philosophy came to America by the end of the eighteenth century and flourished in the schools. That it must have been well known in learned circles is demonstrated by the publication in 1791 of Benjamin Rush's ridicule of it in his *Essays Literary, Moral and Philosophical.* It penetrated into Princeton with John Witherspoon but did not reach a position of great influence as a dominant American tradition until the arrival of James McCosh (1811–94), who was elected president of the College of New Jersey, as Princeton was then called, and professor of philosophy in 1868. But though the Scottish philosophy had already made itself felt in this country in the teaching of philosophy, it did not become one of the major themes of lasting influence. There is very little that is original either in McCosh or in his predecessors. And indeed how could there be in the writings of men who believed that common sense was implanted in all men equally? The sole originality possible would be in the method of expounding the universal truths, no new truths being capable of discovery.[17]

[17] There may be more in American common sense philosophy than I have been able to find, but it should be admitted that the field of American philosophy is not my own. Those curious about it and anxious to discover its importance would do well to read Schneider on the subject *(op. cit.)* and guide their research by his bibliographies.

CHAPTER 14

Kant's Theory of Knowledge

IMMANUEL KANT (1724–1804) was one of those philosophers like Aristotle, St. Augustine, and St. Thomas Aquinas whose thinking seems like a synthesis of the thoughts of his predecessors and whose influence determined the thinking of all who came after him. It may be true that, as William James said, philosophy would have done better to go round Kant rather than through him, but such regrets are as vain as all others. The fact is that philosophy did go through him and the historian of philosophy must consequently show in some detail his accomplishments.

Anti-intellectualism, in spite of the activities of both the rationalists like Wolff and his school and the sensationalists who derived from Condillac, had received a powerful impetus from Rousseau. Not only were his ethical and political ideas of the greatest interest to his readers but also his epistemological concepts. His notion that there resided within each individual a source of knowledge which was not rational but above the reason was fortified by his pointing out what he believed to be the disastrous results of his opponents' theories. These results seemed to him to be atheism, determinism, and a belief in the extinction of the human soul at death. Now it requires no argument to prove that if these conclusions followed from true premises, then they had to be accepted whether one liked them or not. We may not like the idea that the material world is made up of electrical charges, that table salt is composed of a poisonous gas and a dull gray metal which bursts into flame when put in water, that the laws of heredity are the laws of chance combinations, or even that the earth is an oblate sphere. But somehow or other we accept these possibly unpleasant conclusions and try to adjust to them. But few people have ever been willing to accept the results of philosophical reasoning with such equanimity. The cause of this seems to be purely historical. Philosophy, after the rise of Christianity, had been put to work to substantiate the beliefs which were held by faith. That philosophy was the handmaid of theology was so common an idea that it turned into a slogan. But philosophy had been not only the handmaid of theology, it had also been the handmaid of art, politics, ethics, and the sciences. Whenever a person erects a philosophy *of* something, he is accepting the conclusions of that thing and attempting to justify them. There was, however, an important difference between philosophy in, let us say, the Middle Ages and the philosophy of science or art or politics. The practitioners of the former knew that they could not question certain religious dogmas, and if those dogmas could not be justified by what was called the reason, then they had to be accepted by some other faculty or power. The philosopher of science could, if he wished, start by accepting the conclusions of Aristotle, but he could question those conclusions and if he found evidence contrary to them, could overthrow them. It is true that sometimes, as in the cases of Galileo and Bruno, to select only the most famous examples, the results were pragmatically unpleasant, but both of these men stuck to their guns. By the middle of the eighteenth century it had become clear that scientific knowledge contradicted almost every dogma which religion, whether Catholic or Protestant or Jewish or Mohammedan, held sacred. Science gave no evidence either for God or freedom or immortality for the simple reason that the experimental and rationalistic techniques were inapplicable to the subject matter involved. What observation or experiment or inference based on them could be verified only by the existence of God, of a free will, or an immortal soul? One might, and many did, argue from the conclusions of science the doctrines which were religiously satisfactory. But to prove such theories as the atomic constitution of matter, the law of gravitation, or the evolution of species did not depend upon proving the religious doctrines in question. This simple fact, which was so calmly announced by Laplace to Napoleon, was seldom seen by others. And it must be admitted that if for some reason or other a statement is true, then it cannot be contradicted by other true statements, if such statements are about the same subject matter. If, then, one knew prior to one's philosophic or scientific investigations that God exists, that the will is free, and the soul immortal, then any theory which implied the contradictories of these beliefs must perforce be false.

The Profession of Faith of the Savoyard Vicar tried to show that science did contradict these beliefs, and yet the beliefs were true. If, then, their truth was not to be shown by Reason, there must be some other source of knowledge which would illuminate it. For Rousseau that source was, as we have seen, feeling or the heart, a faculty like the inner light or the active sagacity of the soul or insight or intuition or even, with slight modifications, common sense.

But this type of anti-intellectualism was far from being confined to France. In Germany, too, there were men who insisted on the claims of a higher cognitive faculty whose function was precisely to show us truths which the reason could not reach. Among such men we shall treat of two, Johann Georg Hamann (1730–88) and F. H. Jacobi (1743–1819). Both these men were contemporaries of Kant and critics of his work as well. We put them before him, then, not because of their dates, but because their point of view was one which he had to account for.

1. Hamann

Though Hamann's writings are notoriously obscure, they contain a doctrine which can be explicated simply, the doctrine that knowledge is a union of both empirical and rational elements. These elements when analyzed out of the epistemological compound have no cognitive relevance whatsoever. A logical principle, such as *A is A,* is meaningless unless it is seen to be abstracted from a process of thinking and judging. It is so empty of content that it is necessarily sterile. This would be true of all purely formal assertions. But similarly single words, which name individual things, are irrelevant to knowledge until they are integrated into a judgment or proposition.[1] Only complete judgments should be discussed in the theory of knowledge. But really complete judgments would contain not only the purely assertive elements, what the judgments denote, the facts they express, but also the entire emotional aura that surrounds those facts, the love and hate and longing and rejection which the soul feels for these facts. Hamann protests not merely against abstraction in the sense of universal rational sentences, but against abstraction which eliminates any of the significance of the judgments to the human being. A judgment then for him need not be an element of simple logical discourse, emotionally neutral like an algebraic formula. The whole man must be in it.

For the whole man is not the rational man. "Poetry is the mother-tongue of the human race; like horticulture, older than agriculture: painting—than writing; song—than elocution; allegory—than the key to it; barter—than trade. A deeper sleep was the rest of our first parents; and their exercise a giddy dance," he says in his *Aesthetica in Nuce* (*op. cit.,* Bk. II, 197). And again, "Sense and emotion speak and understand nothing as pictures. In pictures consists the whole treasure of human knowledge and felicity. The first act of creation and the first impression of its Historian;—the first appearance and the first appreciation of nature were united in the words: And there was light! herewith begins the perception of the presence of things" (*ibid.*). That the nonintellectual faculties participate in knowledge means for Hamann that cognition is not simply a reception of influences from the external world or even that, as the English Platonists maintained, we project the forms of the understanding into the material universe,[2] but that the whole man as a unit sees things darkly and then clarifies what he sees. Poetic insight is the archetype of knowledge for the simple reason that in poetry—which he uses as art in general—logical analysis is destructive not only of the unity of its object—for any analysis is that—but also of its meaning. One might say that if compound colors, like orange or violet or green, were to be broken down into their primary components, red, yellow, and blue, we would then have a recipe for composing the secondary colors but that their perceptible quality is gone. Man is made in the image of God and was integrated into the natural world as a miniature of its Creator. But where God sees His creation as a whole, we see it in parts. But the poet sees them as a unity. When his vision is put into words, it is a translation which "shows the stuff, but not the workman's skill" (*ibid.,* 199).

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[1] In quoting Hamann, I shall use the edition of Nadler, Vienna. Students interested in a concise account of Hamann's philosophy would do well to read the dissertation of James C. O'Flaherty, *Unity and Language: A Study in the Philosophy of Johann Georg Hamann* (Chapel Hill: University of North Carolina Press, 1952). Only one who has struggled with Hamann's own text will fully appreciate the extent of Mr. O'Flaherty's labor.

This complete and integrated vision is prior to its expression, related to speech as thoughts are to words. Our thoughts before expression are compared to hieroglyphs which in Hamann's time were still occasionally believed to be compendious sensory presentations of Platonic ideas. To state verbally what is in such ideas is to break them down into smaller parts, to string these out in sentences, and thus to lose the corporate unity of the thought which is within them. A hieroglyph, as it was believed to be by many, presented the whole idea without discursive thought; it was a visual emblem which could be understood in a single glance. Thus the poet, insofar as he saw things as a whole, was creating—or at least expressing—unified thoughts, and the poetic word was a reflection of the divine Logos. None of this will make sense to either a sensationalist or a rationalist, and indeed one has to know the Neo-Platonic background of many post-Renaissance aestheticians even to get a glimpse of what Hamann is driving at. But he wants a theory of knowledge which will include unlearned wisdom, insight, intuition, and that kind of sagacity which is often attributed to peasants and the beasts. It is undeniable that, whatever its source, there is a kind of dark insight common to unlearned men which cannot be put into words by the people who possess it. There was, moreover, a long tradition that the Bible was not merely historical and literally true but also, and above all, allegorically true. Beside the fact and this tradition, there was the theory of natural signs, not merely in the sense that smoke means fire, but that comets mean the death of kings. The theory of signatures, as developed by Paracelsus and Boehme, fortified the idea that Nature was a symbol of divine purposes. Throughout the Middle Ages men arose to deprecate learning, to point out that Christ did not choose his apostles from the *doctores* but from the simple fishermen and peasants, and the theme of the child Jesus confounding the scholars was a favorite. Sceptics like Agrippa von Nettesheim had emphasized the need of a childlike heart if we would reach an understanding of God's truths. The antiquity of symbols was played upon so frequently that when in our own days we come upon a Jung with his theory of the Collective Unconscious which automatically knows the meaning of the archetypal emblems, we cannot help wondering whether he had not simply reverted to an old traditional folk-belief. In any event there are intimations of all of this in Hamann, and his purpose was to refute both the intellectualists and the sensationalists. By pointing repeatedly to the ineffable parts of knowledge, he was able to grant the least of us a share in universal human—and for him divine—wisdom.

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[2] I am purposely using Kantian language here, though it is anachronistic.

Now wherever the philosopher or scientist finds regularity and order, he will use it for theological purposes, if he is interested in theology. The cosmological proof of the existence of God preceded the birth of Christianity by five centuries. That scientists have been able to discover regularity and order is obvious. Either it stands as a brute fact neither requiring explanation nor engendering inference, or it becomes evidence of an agency who orders and regulates. If the whole cosmos is seen to behave like a machine or a *Great Animal,* to use the Stoic term, then it becomes a picture, and not merely a set of theorems, which is open to any pair of eyes to see. The simplest peasant who sees in the sky evidences of coming rain, who plots his life after the course of the seasons, for whom the sun and the moon are calendar enough, who arises with the sun and goes to bed with the coming of darkness, is not an astrophysicist nor even a meteorologist; he is an ignorant and superstitious man. But nevertheless he *knows* things in an inarticulate way, and the fact that he cannot put his knowledge into scientific terms does not imply that his knowledge is false. But the sympathy which a sensitive person feels with a picture or poem is also in part ineffable. We have the habit, to be sure, of translating the psychological causes of our behavior into reasons. These reasons, we have recently learned, are as likely to be wrong as not. We usually do not know the real causes of our likes and dislikes. Sometimes they have been buried deep within us to save face. To uproot them is a long and painful task. If reasons were required before one could know anything, the human race would have died out centuries ago. The animals, including the insects, as Bergson pointed out to the confusion of the intellectuals, know things which, if we knew them, would require years of study. But they know them without study. Now none of this means that civilized man should pretend to be a beaver or a wasp, but it does mean that he should not reject as illusory or trivial nonintellectual knowledge. It can probably be explained in a manner less mysterious than that in which Hamann offered to explain it. But nevertheless Hamann is not to be tossed into the limbo of a footnote or two because of his anti-intellectualism or his naive belief in what he thought was the word of God.

The theories of Hamann's aesthetics were anticipated in his *Socratic Memorabilia,*[3] published as early as 1759, that is, contemporaneously with the *Encyclopedia.* Socrates is presented as a union of opposites, of wisdom and ignorance, a lover of both inner and outer beauty, an artist and a philosopher. (Hamann makes much of his having been a sculptor, bringing into the light of day the form hidden within the stone.) In this he seems analogous to Christ, the most beautiful of the sons of men promised as our redeemer, and yet a man of sorrows, full of wounds and stripes (*op. cit.,* Bk. II, 68). This is the meaning of the Oracle which proclaimed Socrates to be the wisest man in Greece: he knew that he knew nothing. But, he continues (*ibid.*), "the deliverance of a message from God will say as little as a comet to a philosopher who shares the current taste." (He is referring to Bayle.) The philosopher who knows nothing and has no possessions lets Fortune take her course and, so to speak, follows Nature in the sense that he opens his heart to God. Such a man does not struggle against the divine law but accepts it. He knows in his ignorance, paradoxical as the phrase is, as the peasant or the animal knows without rational or scientific discourse. The Socratic sceptic knows without argument or demonstration and his disclaimer of knowledge is really a disclaimer of the apparatus of logic. For if one knows, one needs no such apparatus; belief replaces reason. "Our own being and the existence of all external things must be believed by us and can be proved in no other manner. What is more certain than the end of man, and of what other truth is there more universal and truer knowledge?" (*ibid.,* 73). And yet what rational proof do we need of this truth? Belief rests upon proof as little as taste and sight. The poet thus in his "hieroglyphic shadow-plays" can be as true as the philosopher with his reason and systems of thoughts.

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[3] *Sokratische Denkwuerdigkeiten fuer die lange Weile des Publicums zusammengetragen von einem Liebhaber der langen Weile.*

The belief for which Hamann is arguing is also religious faith. "If any man think that he knoweth anything, he knoweth nothing yet as he ought to know. But if any man love God, the same is known of him" (I Cor. viii, 2–3). These verses are quoted by Hamann (*ibid.,* 74) with the *addendum,* "So Socrates [was known] by Apollo for a wiseman." This knowledge is the flowering of a seed within one, not the sterile combination of external data. It is "natural wisdom," which comes from ignorance, as life and being come from the Nothing. The natural wisdom of Socrates was attributed to his Daimon, but the name given to its source is of no importance. What matters is that self-knowledge can be the spring of all knowledge when a man rejects the fragmentary bits of information which come from the senses or the empty formulas of rationalism. It is a kind of knowledge which requires no verbal expression; we know ourselves by being ourselves and listening to the voice of our genius. This kind of insight will not bring us knowledge in the scientific sense of that word, but for Hamann scientific knowledge was at best of inferior value. What was needed, as the legends of Socrates seemed to show, was not information about the moon and stars but knowledge of mankind.

A man's life to Hamann was of more interest than his ideas, or perhaps it would be better to say that for him a man's ideas as exemplified in his life are his ideas in action. To live requires no learning, no science, no axioms, definitions, and postulates. It requires simply an insight into right and wrong, like that given by the heart of Pascal or Rousseau.[4] The life of Socrates had become a legend only a few years after his death, and since he left no writings, his influence was spread through his example. Naturally, various lessons could be learned from his life as from that of all men, for no one is so consistent in all that he does as to leave a clear and unambiguous pattern behind him. For Hamann, Socrates is first of all an example of military courage. In the second place, he was no author but a soliloquist, and his art was that of a sculptor rather than that of a painter. He molded forms rather than painted them.[5] His courage is a symbol of his confidence in his own integrity; as Nietzsche was to write: "What is good? Bravery is good." One needs no book-learning in order to be brave. One risks one's life indeed, but risks it for something which one believes and knows to be better than life itself. His soliloquizing was self-examination, speaking with the inner voice which could not lead him astray. That he carved forms out of rough stone rather than painted those which, in Plato's words, were copies of copies, emphasized his creative powers. He is reported by Plato to have called himself a midwife of souls. Self-security, self-examination, and creative activity seem to be the three values which Hamann finds in his subject. And all three, he thought, could be found in a life as guileless as a child's.

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[4] Though in Pascal's case, the heart may be simply the *lumen naturale.*

But behind all this was a theory that there was a union of thought and speech in what he believed to be "natural language." This union is broken down by the rationalists, who separate speech from thought and thought from speech and consider each in isolation, as if they could exist independently. In sophisticated languages this is a plausible procedure presumably, but in natural language it is vicious. Natural language exhibits two traits, the immutable ways of thinking of a people and the changing. The former are the heart and soul of a people which never change; the latter the outer clothing. The former will be found in primitive speech; the natural man is as God made him. The Bible, which is God's own speech, is written in the popular language of the people to whom it was addressed, and therefore will be found to contain parables, allegories, metaphors, *images.* Just as the first literature was poetry, which combines inextricably images and ideas, so the speech of the natural man was concrete and living, charged with feeling as well as denotative meaning. It is likely that Hamann's piety led him to use the Bible as the standard of normal natural speech, for he was deeply religious and believed in the literal revelation of the Scriptures. Man then should write as God wrote.

Hamann's reaction against the rationalism of his time had little immediate influence on philosophy, though Goethe acknowledged his debt to him and in the nineteenth century Kierkegaard was enthusiastic about him. That human emotions have a cognitive importance becomes clearer when one realizes that desire and aversion can orient one's thinking, choosing some problems as what will be called important, and rejecting others as trivial. It should also be remarked that when one is in the presence of an individual object, be it a person, a work of art, the history of a people, the rational categories are never adequate. It makes little difference what name one gives to the characters that make something individual, one of its kind, whether it be called the thing's spirit or inner nature or "meaning." The fact cannot be denied that much of our life is spent in the confrontation of such individuals, and that scientific knowledge simply throws up the sponge in the battle for understanding them. One can generalize about what sort of poems captivate one, cause one to suspend one's practical activities as if in a sort of enchantment, but such generalizations tell us more about ourselves than about the poems. Hamann was aiming at something like Bergson's or Croce's intuition in which discourse is abandoned and complete immersion in the object alone will enlighten one. The paradox is that even if one be contented with the experience of reading, one will perforce recreate the poem to oneself and within oneself by a curious process of interpretation which is inevitably limited and indeed determined by the range of one's experience. Surely Hamann must have known of the various and conflicting interpretations given to the one book which was written in the natural language. But, like Rousseau and others of that stamp, he could always evade the problem by maintaining that contemporary man was corrupt and had forgotten how to read. Nevertheless, in spite of the obscurity of the idea and the difficult problems which it presents to the philosopher, the notion that man does have a kind of inner knowledge of truths which in no way depends on either external experience or reasoning had a long history in modern philosophy, and it seems probable that men like Schelling derived their inspiration largely from him.

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[5] *In Vergleichung eines Xenophons und Platons wuerde vielleicht der Styl des Sokrates nach den Meissel eines Bildhauers ausgesehen haben und seine Schreibart mehr plastisch als malerisch gewesen sein.* Vol. II, p. 80.

2. JACOBI

Jacobi's nonrational faculty was called by a variety of names in his various works, but since he often called it the *Vernunft,* which is usually translated *the reason,* and since it was not what most people mean by the reason, we shall call it rational intuition. It operates by simple contemplation, by looking directly at its objects, as the *Nous* of Plotinus operated when in the presence of the Ideas. It was a kind of immediate knowledge whose truth was self-evident. This kind of knowledge had been traditionally exemplified by sensory perception. People like Locke, Berkeley, and Hume maintained that in sensory perception a man simply was face to face with certain objects of knowledge and that when, for instance, one was confronted with a sensory complex one could not be mistaken about what was before one. No interpretative judgments were involved. This had been questioned by the Scottish School and by some of the French philosophers, but in general perception was held to be immediately given and incontrovertibly true. No one can deny that the direct evidence of the senses is often called upon to verify our ideas, and that when we are faced with what we call the facts we usually accept what they tell us. To maintain that even such knowledge was mediated by previous experience or consolidated by perceptual habits was not the position customarily adopted.

Now Jacobi when he spoke of intuition also maintained that its objects were immediately given. But they were not the same objects or of the same nature as the objects discovered by the senses. Sensory perception was simply an analogue of intuition. Intuition is directed not upon sensory objects but upon supersensory. In his earlier years, he says,[6] in the preface to his dialogue on *Idealism and Realism* (1787) (*op. cit.*, Bk. II, 10), he had had a mistaken notion of what the *Vernunft* was. At that time he had thought of it as a faculty of forming concepts, judgments, and inferences, "floating naked over sensibility," a faculty "which can make manifest absolutely nothing by itself, with full confidence in the objective worth of this exhibition." It might be thought of as a faculty above the *Vernunft* in the narrower sense of the word. But he decided to keep the old name and give it a new meaning. When a philosopher does this, he is either saying that he prefers to give a new definition of an old word or that he is developing a new theory of an old subject matter. Jacobi here is certainly doing the latter. *Vernunft* as a naked faculty floating over sensibles could not reach truth, for truth must be grasped immediately and since the true is not to be found entirely in the perceptual world, the faculty which attains truth must be suprasensible. But since the apprehension of the true must be immediate, then the true must itself exist in a special world of its own.

It would be impossible to deny that the theory of rationalism insofar as it believed the reason capable of reaching the truth by its own means rested on very shaky foundations, unless all that was meant by truth was logical consistency. It was an old story that existence could not be deduced from essences except in the case of God, and even in that case there was plenty of argument to show that the deduction was faulty. It cannot be repeated too often that the truth of logical deductions can never be more than the truth of the premises from which the deductions are made, if we are talking about factual or existential truth. But that was precisely what Jacobi was talking about, and since he was attacking such rationalists as Wolff, he was bound to ask in what sense their premises were self-evident. I can find no place where he denies the self-evidence of simple perceptual assertions. But he was denying that God, freedom, and immortality could be proved by sensory perception or, for that matter, inferred from sensory perception. In that he was in agreement with the Savoyard Vicar. If, then, these truths could not be proved in this manner, one had either to deny that they were factually true or find some other means of discovering their truth. Where Rousseau found the heart or feeling, Jacobi found his *Vernunft,* or intellectual intuition. He was then forced into the awkward position of either agreeing to say nothing whatsoever about the objects of this suprasensory knowledge or of saying it in intelligible language. He naturally had to choose the latter alternative. But the moment he did that, whatever he said was bound to be judged rationally, for that is the only way the human mind can judge anything. The heart may have its reasons which the reason knows not, but the only way a philosopher can tell what the heart's reasons are is by referring them to the brain's reasons.

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[6] I quote from the *Werke*, Leipzig, 1812–25.

The name that Jacobi gave to what scientists usually called reason was understanding, *Verstand.* Here he was at one with Herder and later with Kant. The understanding is the faculty of abstracting general traits from particular things and events and of deducing conclusions from premises. In a letter to Johann Georg Schlosser, written in 1787, the year in which Kant published his revised edition of the *Critique of Pure Reason,* Jacobi says, "Common human understanding (*Verstand*) abstracts, generalizes, particularizes, judges, concludes, can do all that *Vernunft* can do, and where it is there is always necessarily also *Vernunft.* Strictly speaking, wherever *Vernunft* is, there too is human understanding" (*ibid.,* 470). The two faculties supplement each other. Without understanding, the *Vernunft* is an empty potentiality. It can make no judgments without data nor can it draw conclusions. Therefore *Vernunft* requires the understanding to bring potentiality into actuality. The two powers are helpless in isolation from each other. Just as Reid was maintaining at about the same time that sensory perception was inarticulate without judgment, so Jacobi, and Kant too for that matter, was maintaining that to reason we have to have something to reason about, and to know what we are knowing we have to have insight, intuition, perception, an apprehension of something. We do not spontaneously create out of nothing the subject matter of discourse; it is given to us out of existence and our intellectual task is to organize and interpret it. Therefore to conclude that either *Vernunft* or *Verstand* is the one source of knowledge, as the rationalists or the sensationalists might be accused of doing, is to argue as if we could digest without food or eat without digestion, breathe without oxygen or absorb oxygen without breathing. So far almost anyone might have agreed with Jacobi, but the rub came at the point where he maintained that truth was obtained by apprehension or contemplation. If the arguments of the Ideologists were sound, it is habit which condenses experiences into perceptions, and the feeling that we are immediately apprehending a truth is misleading. Any learned procedure will seem immediate and the processes involved will drop out of consciousness. If perception is learned, then it too will have to be thought of as the product of perhaps a long period of training in which stimuli below the level of awareness, interest, or other various emotional states participate in determining what we shall perceive and what judgments we shall make about it. Thus, even if we had the belief that we were face to face with the true, the good, and the beautiful, that in itself, according to the Ideologists, would not be valid proof of anything more than the end term of a habit. But Jacobi does not walk that path at all. Believing as so many of his contemporaries—and ours too—that there is a kind of immediate knowledge which is not established by trial but is self-established, he insists that all truth must be the direct and unmediated apprehension of objects and that therefore the true, the good, and the beautiful must be seized in exactly the same way as redness, roundness, heaviness, and other perceptual qualities.

When Jacobi came to reprint his dialogue on *Idealism and Realism,* he saw that he might be misinterpreted in his theory of *Vernunft* and therefore made it more precise. In the preface to that work he used the term *rational intuition* for what he had previously called *Vernunft.* Just as there is sensory intuition for the things of this world, so there must be rational intuition for things of the world beyond the senses (*ibid.,* 59). There are only two sources of knowledge, sensory perception and spiritual feeling. "What we know from the source of spiritual feeling we say we *believe.* So say all of us. In the case of morality, along with freedom as well as with spirit and God, there can only be belief. But perception, which grounds knowledge in sensory intuition (peculiarly called knowledge), is as little above feeling which grounds knowledge in belief as the races of beasts are above the race of men, the material world above the intellectual, Nature above the Creator" (*ibid.,* 60). There are then two worlds, as in the Platonic tradition, the sensible and the intelligible. Spiritual intuition reaches into and apprehends the latter, sensory the former. The ability to penetrate the intelligible world is peculiar to humanity. Divine things are open to our intellectual scrutiny and we need neither concepts nor percepts to grasp them. Spiritual feeling will do. The divine things which it grasps are the values of truth, goodness, and beauty and it grasps them, we have repeatedly said, as the senses grasp their mundane objects.

Objections to this type of anti-intellectualism would arise principally from the disagreements between the spiritual feelings of John Doe and Richard Roe. Though there are disagreements also over sensory intuitions, they are never so great as those that arise over spiritual intuitions. But we shall not enter into that dispute since we are more interested in what a philosopher contributed to the history of his subject than in the mistakes he may have made. By insisting on intellectual intuition, *Vernunft* rather than *Verstand,* a suprasensory world in opposition to a sensory world, he did raise at least one question which his fellows were forced to face. Whatever be the grounds for our belief in God, freedom, and immortality, the virtues, aesthetic values, and all the other inhabitants of the noetic heaven, people do have as firm a belief in principles of religion, ethics, and aesthetics as in their day-by-day perceptions. The belief that truth is better than falsehood, however both terms are defined, is held by those who believe in it just as strongly as the belief that the world is round or that two and two are four. Jacobi is probably not so much interested in proving the existence of divine and earthly things as in justifying the assent which we give to our beliefs. There is, according to Cardinal Newman, a difference to be made between real assent and notional assent, and the former may be given without previous demonstration. Belief may well be prior to reason and to understanding. Few people bother to prove what they believe even in their daily business of living. They give real assent to ideas without examination for the simple reason, if reason is needed, that the ideas work, that they have not time to examine and prove each of them, that general consent is given to them by other people, that few if any experiences ever contradict them. But what actually is assent? It is not a property of the objects of knowledge; it is something that we do. It may be induced by logical proof; it may be induced by a dozen other impulsions. But it is our contribution, something psychological, to be given or withheld. If belief is to be advanced as evidence of the truth of what we believe, as it is in common-sense philosophy and often in empirical philosophies, then why is it not good evidence wherever it is found? Sooner or later, as Jacobi insisted even in his earliest writings, an act of faith is required if for no other reason than setting up premises. In those fields of profoundest interest for human beings, the fields of ethical, aesthetic, and religious values, the very nature of the case prevents our advancing factual evidence of the sort we advance for perceptual beliefs. We may dress up our feelings in pseudo-scientific costumes, but in the long run it will be perforce some nonrational instrument that will determine our beliefs. The horror we express at what we disapprove of, or gratification at what we approve of, has to be expressed rationally if we are to express it at all. But all that is posterior to the assent we give to the beliefs which we then attempt to justify. Jacobi's assumption of an intelligible world may not be satisfactory as a solution of the difficulty; however, it was part of a tradition to which not the stupidest philosophers had adhered and it was constructed on the analogy of ordinary perceptual experience. His philosophy is a challenge to the so-called empiricists in that he asks them to distinguish between their kind of certainty and his.

Only a few more remarks should be needed to clarify Jacobi's philosophy. Though he believed in the reality of the intelligible world, he did not people it with universals. One reason why he believed in intellectual intuition or spiritual feeling was that he wanted some instrument for apprehending individuals which were not material objects. It is a commonplace that the individual is unintelligible. Only those things named by common nouns and adjectives can be handled rationally; the individual can be perceived but it is not understood. Sensory intuition was a means of seeing, and for it to become intelligible the reason and the understanding had to get to work upon it classifying, generalizing, judging. But a work of art or an ethical act is also an individual and if we are ever to apprehend it in its individuality, we need some nonsensory power to do so.

The religious experience and the aesthetic experience are paralleled by the ethical experience. For scientific purposes it is enough to see the universal exemplified in the particular. But is a moral act simply an example of a general rule? Rather, is not the moral problem one of appreciating the peculiar circumstances involved in a given situation and of committing oneself to a course of action which by its very peculiarity cannot be subsumed under a universal law? We use rational terms like lying, cheating, stealing, killing for vices and truthfulness, fair-dealing, respect for others' goods for virtues. But the slightest knowledge of moral casuistry shows how far these names come from actually identifying the acts that we contemplate or have committed. It is true that one cannot err in calling Julius Caesar or Dante or Newton men and, if one stops there, no problems are involved. The problems arise when we want to go beyond such abstract statements and describe these men as whatever it is that their names denote and connote. We therefore substitute biography for psychology. However fuzzy and vague were Jacobi's formulas, the problems which they were invented to solve are clear and definite. The basic trouble in Jacobi is his presuppositions. So long as knowledge is understood to be confrontation of a subject by an object and the apprehension by the former of the latter, so long will some means have to be provided for apprehending everything that we know, whether it is material or immaterial, particular or universal, content or form. One of the major contributions of Kant was his analysis of this basic problem.

3. *The Critique of Pure Reason*

A student of philosophy in the third quarter of the eighteenth century, had he been able to read all the books, would have been tormented by the appearance of a mass of paradoxes. On the one hand there were philosophers, like Locke, Berkeley, and Hume, who seemed to be aware of nothing in the world but the content of knowledge or perception or insight: the sensory qualities, the unmodified ideas, things. On the other, were men like Lord Herbert, More, and Cudworth, who replied that such entities were meaningless unless organized into judgments. There were men like Condillac who seemed to insist that knowledge flowed into the mind from without, and others like Reid who replied that in all knowledge there must be an act of perception. The student's attention would wander from the objects that physics and the other sciences had revealed to him to the laws that seemed to control the behavior of those objects. The objects came and went, were created and destroyed; the laws stood in eternal stability. On the one hand was a variety of individual perceptions, the peculiarities of Peter's experience as against Paul's; on the other, the unity of a world of logic which seemed to determine the truths of both. Whereas sensory experience seemed to be analyzable into the little tesserae of colors, sounds, smells, tastes, and textures, the objects and events which they qualified seemed to be synthesized into a unity. On the one hand stood his scientific training which did not need the hypotheses of God, freedom, and immortality; on the other, his conscience or intuition or heart which convinced him that science was for that very reason incomplete. On the one hand stood understanding, on the other, intuitive reason, the *verstand* and the *vernunft*. Bewildered by this array of conflicting facts, for they would have seemed facts to him, so convincingly did all philosophers write, he would have wondered whether he should not relapse into the attitude of a Montaigne and cry, *Que sais-je?*

I am assuming of course that the young student not only had access to all the books but also read them. He would have learned from Descartes that the only certainty is his own existence; from Malebranche that we see all in God; from Spinoza that God is another name for the universal substance whose attributes are known to us as mind and body; from Locke that we can know only our own ideas and construct knowledge out of them by certain simple operations common to the whole race; from Locke's opponents, the Platonists, that the most certain knowledge is born within us and that experience serves only to provide instances of it; from Reid that this is all nonsense and that we perceive real objects in the external world and that we participate in a common mode of knowledge of truths named common sense; from the Savoyard Vicar that one must discard the findings of common sense and listen to one's own inner feelings; from Jacobi that such feelings attain truths which can never be discovered in the ordinary world, for the simple reason that they do not pertain to that world. He would have learned all these things and hundreds more, and since the men who had propounded all these notions were as reasonable and as intelligent as he himself, he would then have asked the question of how all of them could be right and yet all at odds with one another. Form and content, laws and their objects, judgments and data, subjects and qualities, perceptions and sensations, synthesis and analysis, unity and plurality, rationality and experience, the heart and the brain—were these aspects of reality never to be brought together into some sort of consistent, if not unified, system? Or was it possible to find some formula by means of which we could still have a cosmos and integrate into it the bewildering chaos of fragmentary judgments? It was one of Kant's tasks to attempt such an integration and his attempt is found in his *Critique of Pure Reason*. There are as many interpretations of this book as there are interpreters and no one can be sure that his is the correct one. But, like Plato's

Dialogues or Spinoza's *Ethics,* it constantly tempts the student to try out his own.[7]

Among the puzzles was one which could be interpreted as fundamental to most of the others. Experience insofar as it was individualized could give one only tentative generalizations. No one could maintain that his experience was universal and eternal, and consequently no one's generalizations could ever go beyond the extent of his own experience. One could say, "As far as I know, all material substances fall to earth with a constant acceleration," but never, "All material substances always have and always will so fall." In the language of the philosophers, experience could give one contingent truths but not necessary truths. Hence, if experience as dated and localized events was all that one had to go on, as Bacon had been interpreted as saying, then science as a set of necessary laws was an illusion. The great structure of Newton, which had rightly evoked the enthusiasm of the whole eighteenth century, would crumble to pieces except as generalizations which might be corroborated by his investigations but which could not be held as necessary and eternally necessary. But Newton, above all scientists, had been thought of as almost the voice of God. It was believed, not only in the eighteenth century but also well into our own time, that natural law was a corpus of edicts given to the cosmos by its Creator. One cannot overemphasize the impact of the new science upon the philosophical imagination. It was knowledge which was not only verified by experience but determinative of experience. One not only saw, for instance, objects falling as the law said they should fall, but there was no way of making them fall otherwise. The arguments of Malebranche and Hume seemed to show that even the causal law, which was interpreted as essential to science, had no roots in experience at all. Regular sequences might be observed, but the necessity of the sequences could not be. Where then was one to find a justification for science in the sense of necessary and universal laws?

The only sentences which anyone knew whose necessity was undisputed were tautologies. In any sentence whose predicate meant the same thing as its subject, there could be no debate about its truth. Leibniz had insisted that the basis of all reasoning was the assertion of identities, *A is A*. D'Alembert had repeated the assertion in the *Encyclopedia*. No one could dispute the statement that a triangle is a plane figure bounded by three straight lines or that 5 is the fifth cardinal number. These statements were either definitions, and definitions that were not merely nominal, or the logical consequences of such definitions. But scientific laws were not tautologies. The law of gravitation contains information in its predicate which was not to be found in its subject. When Newton said that gravitational force varies directly as the product of the masses involved and inversely as the square of the distance between them, no one believed that by staring at the concept, *gravitation,* one would reach that law. It was true of all bodies this side of the moon and beyond the moon, and to be true *of* things was different from being true formally or verbally. One can invent hundreds of statements which are consistent within themselves (that is, whose predicate says no more than the subject does), but that does not mean that such sentences will be true to fact. Scientific laws, on the other hand, were both true to fact and at the same time as certain as tautologies. How could this be? The empiricist could demonstrate why certain sentences were true to fact but could not explain their necessity; the Platonic idealist could explain the necessity but not why necessary propositions were true to fact.

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[7] What follows is, to be sure, my own, but I do not mean to say that I have discovered through insight what others have not discovered before me. I have read books, though far from all of them, and have had teachers. I have also lectured to students and listened to their questions. All such experiences teach one something, and how much of what one says is really one's own is always problematic.

Kant approached the problem first by inventing a new set of terms for all statements. Those in which the predicates and the subjects meant exactly the same thing he called *analytic,* and he believed that they were formed by analyzing the meaning of the subject and expressing it in the predicate. Thus the old Aristotelian definition of Man, "Man is a rational animal," might be thought of as an analytic judgment since irrational animals are not men, all men are rational animals, and the very meaning of the concept, Man, not the word, is rational animality. This is not supposed to be a rule for verbal usage, but a statement of correct verbal usage, and the adjective "correct" means more than "the way people are used to using the term," or "the way I have always used the term," or "the way you should use the term if you want to discuss human nature with me." It is actually true that man is a rational animal and anthropoids, like barbarians, the insane, or even children, are not strictly speaking men. But if one should say, "Men, or rational animals, inhabit most of the lands of the earth," what is said may be true, but it could never be verified by analyzing the meaning of either "Man" or of "rational animal." There is no way of discovering through an analysis of the *rational animality* that (1) there are any rational animals, (2) that if there are, they inhabit one or more places. Their distribution is something which is learned from investigations, such as explorations. Consequently, some judgments are true because of the internal evidence of the meaning of their terms, others because of empirical verification. The latter, in which the predicate conveys new information, put together into one proposition several ideas and that is why they are called *synthetic.*

This is easily grasped, but a new complication now arose.

No experience whatsoever, it was held, is needed to analyze the meaning of a term. When one does geometry, one may illustrate one's theorems with ruler and compass, but the illustrations are not proof. The proofs seem to be discoverable without anything more than reasoning, and a capable geometer ought to be able to make them without any figures at all. As in arithmetical calculations, the arabic numerals are simply an aid to memory; one is not adding the marks on the paper, but what they symbolize. So, in geometry one is not reasoning about the pictures but about what they exemplify. Though it is undeniable that historically geometry arose from measurements and arithmetic from counting fingers or pebbles or something of the sort, one could not count the fingers or pebbles or measure anything without at least rudimentary mathematical concepts in one's mind. Psychologically the drawings and the numerals may be needed as a prop; logically they are irrelevant. Numerals could be strokes instead of the curleycues which we actually use, and any rough drawing will do in geometry. Hence one can say that historically or psychologically we have derived our ideas from experience, but logically the ideas come before the experience. Logical priority is clearly different from temporal priority. Temporally we often discover laws after we have come upon their exemplifications. In fact, that is normal in empirical science. But the laws are still logically prior to their exemplifications since without them the exemplifications would exemplify nothing. Once one possesses the law, one can then predict that certain exemplifications will be found, as when Leverrier discovered Neptune by making calculations. If there are any propositions that are logically prior to all experience whatsoever, they are called *a priori* propositions; and propositions that arise only after some experience is acquired, and cannot arise without experience, are called *a posteriori.* I have used the word "proposition" here where Kant used the word "judgments." I have done so to conform to our contemporary usage. But the word "judgment" is Kant's and it is important to retain it, since for Kant what we call propositions or assertions are made by the human mind. Knowledge is an affair of judging the true and the false, the good and the bad, the beautiful and the ugly. It is not a simple apprehension or absorption of facts which we then symbolize. Meaning for Kant is what *we* mean, not what terms or facts or statements may be said to mean regardless of human intentions. Kant was not a psychologist nor was he interested in being a psychologist. But he did believe in the existence of a human mind which was a judging subject, the *I* who knows or fails to know. It must be recalled that in his time logic was still, as it was for Port-Royal, the art of right thinking. It was not an algebra of possible logical relationships.

It is easy enough to understand why analytic judgments should be a priori. But synthetic judgments seemed by their very nature to be necessarily a posteriori. Yet the laws of physics are necessary truths, not merely probable, according to Kant, and at the same time are synthetic. How then are synthetic a priori judgments possible? They are needed for the expansion of knowledge, and expansion is needed unless we are to be satisfied with a set of tautologous ideas. If we wish to use the causal law, that everything which happens must have a cause, have we any right to judge that such a law is justified? As Kant himself says, for this is his example, when we think of something happening, we mean by it that something is occurring which did not previously exist. But out of that idea, in isolation from all others, we could never derive the additional idea that it must have been preceded by a cause in the absence of which it would not have occurred. That a cause precedes its effect is not enough, though if we think of something's happening at a given moment we could logically deduce the additional thought that something must have happened before it. But that this something necessarily produced or caused it is new information. Hume had shown that the causal law could not arise from experience, for the idea of necessity is nonempirical. Science is full of causal statements and according to Kant causality is essential to science. The causal law, then, is logically prior to any scientific experiment—for it determines what the experiment will be; at the same time it is itself a synthetic judgment.

To solve this problem Kant proceeds to analyze knowledge into sensory intuitions, the impressions and ideas of Hume, the ideas of primary and secondary qualities of Locke, the sensations of Condillac. These are simply the colors and sounds and smells and so on which we directly apprehend through sensation. They are called as a group phenomena or appearances. All we apprehend when we see a color is the color itself, a representation or *Vorstellung.* The objects of sensory intuition are the stuff about which we make judgments, its matter. In actuality we do not simply perceive phenomena one after the other, but we perceive them in a certain order, lying side by side, joined together in physical objects, occurring in a temporal series. This order, which of course may vary, is as a whole called the *form* in which the matter is organized. Originally the distinction between matter and form was made by Aristotle, but for him the form was also the purpose, that for which the matter existed. In Kant it is that order in which sensory qualities are perceived, when he is talking of perception. This part of his *Critique* he calls the *Transcendental Aesthetic,* meaning by "aesthetic" what the word meant in Greek, namely that which is grasped by the senses, and by "transcendental" that which is common to all sensible intuitions and not peculiar to any one set of them. If he can find a set of principles discoverable in what all the five senses apprehend, he will then have discovered the principles of sensibility a priori. Without them there will be no sensory intuitions; when we have sensory intuitions they will be ordered according to these principles. But first he must eliminate all parts of cognition which by their nature could not be found in sensation.

It turns out that there are only two forms of sensory intuition, space and time. This means that whatever we are seeing or hearing or smelling or tasting or feeling will be spatial and temporal or one of the two. Our sensory qualities are spread out side by side, above and below, inside and outside of each other; they may exist simultaneously or in a chronological sequence. We may, to be sure, think of things which are not in space and are timeless, but we cannot perceive them. The spatio-temporal matrix is pervasive of all phenomena and so long as we direct our attention exclusively to phenomena, we are going to perceive them arranged in that matrix. When we look into the external world we see it spread out in three dimensions; when we introspect, we are aware of states of mind one after the other. There is no other way of intuiting any qualities. But at the same time they are not empirical concepts. If space, for instance, was derived from my experience, it would have to be limited to that space which I occupy, for that is the only space of which I have experience. Again, how could I derive space from experience when I think of objects moving off into spaces which I do not perceive? The only space which I perceive is strictly limited; but when objects move away from me, I do not say that they are annihilated. I say that they are now occupying different positions in space which are beyond my perceptual grasp. I can furthermore think of space without any objects in it, as one does—or did in Kant's time—when solving geometrical problems. But I cannot imagine or perceive objects which do not occupy some space. One must here distinguish between the idea of a color, for instance, in the sense of the definition of a color, and the perception of a color. One cannot perceive a punctiform color, but one can define what one means by *red* or *blue* without reference to spatial dimensions. Space as a pure form of sensory intuitions is again unified; we may speak of several spaces, but when we try to imagine them, they are lying side by side either contiguously or separated by a spatial distance. Thus two perceived objects lying on a table may be separated from each other but, though there is nothing but air between them, we put them and the air in the same total space. If there were nothing between them, they would be in contact. Space is thought of as a whole, an infinitely extended whole which we break up into little spaces by the frontiers of our perceived objects. We could never derive infinite extension from atomic bits of space; but we can derive the atomic bits from infinite extension. Space is logically prior to all perceptions (sensory intuitions); it is the form in which they are arranged and without which sensory intuitions would be impossible. It is then absolutely nothing but the way in which we intuit sensory qualities and can have no existence apart from us. All phenomena are in space, and whatever things are not phenomena are not in space. So long as we confine our knowledge to the apprehension of sensible qualities, we shall see them in space; but if we enlarge our knowledge to subjects which are not sensible qualities, then they do not have to be in space and in fact are not in space. There is no other trait of phenomena, no color or sound or what one will, which is universally and necessarily found in all of them. Space is unique in this respect.

Similar arguments apply to time. Regardless of sensory qualities, what we intuit sensibly is either simultaneous or successive. The temporality of sensory experience is irrelevant to the kind of experience we are having; any kind may be simultaneous or successive. Therefore we can subtract phenomena from time and still have time on our hands as that which makes phenomena possible, but if we subtract time from phenomena, they will vanish. Like space it is intuited directly, but also like space it cannot be derived from the objects which we intuit. For there is no sensory quality, no color or sound which is the color or sound of time, any more than there is a sensory quality which is the peculiar quality of space. It has one important difference from space: that it is the universal condition of all phenomena, whereas space is the condition of external phenomena only. Kant does not believe that images as we dwell upon them occupy space; they are internal, to use his term, to the mind. We do not locate our dreams in the external world; we call them private. But even in dreams the events take place in time, one after the other.

I find nowhere in the *Critique* a discussion of the problem which the obvious extension of images and dreams and hallucinations presents. They are extended at least in two dimensions and in dreams would seem to have three. And yet these private spaces do not mesh with public space. Moreover, private time passes at a rate different from that of clock time and a good case might be made out for its flowing at varying rates of speed, now slowly now quickly. But Kant, as is generally agreed, was thinking solely of Newtonian space and time; the former was a receptacle of infinite extent and uncurved, the latter a river flowing evenly without beginning or end.

Time and space thus become the forms of sensory experience, the way in which the human mind inevitably arranges phenomena. They are logically prior to experience, since without them no experience is possible. However different and various our perceptions may be, they are always conditioned by time and space, coming one after the other and spread out in three dimensions. For this reason Kant maintains that they permit us to set up formal systems of propositions which will be necessary and not contingent, and he thinks that, above all, such systems are exemplified in mathematics. Geometry to him is the mathematical analysis of space. And the behavior of all physical objects, whether we are studying their movements, as in dynamics, or their structure, as one might in general morphology, is limited by our conceptions of space and time. There is no other way in which we can have any sensuous experience, and since the spatio-temporal matrix is the absolute form of all sensory experience, through our knowledge of that matrix we can reason about dates and places as if they were independent of our minds. Kant obviously does not mean that any individual person has to know geometry and arithmetic before he can perceive a succession of events or solid objects. Our knowledge of space and time is intuited as sensory qualities are intuited. He as a philosopher is taking ordinary unreflective experience and through analysis discovering what is logically involved in it. So, for instance, we always see things according to the laws of visual perspective without being aware of what those laws are.

Behind Kant lie the two traditions that we have seen on the one hand in Locke, Berkeley, and Hume, and on the other in the English Platonists and Rousseau. The former had proved to his satisfaction that all sensory qualities, which he called the matter of experience, were subjective, and, in Hume's case, that there was no way of penetrating the perceptual screen and discovering what if anything was behind it. The latter had shown that relations could not exist externally to us, for there was nothing in the material world that could correspond to a relation. Wave lengths, air waves, chemical substances might explain the various colors, sounds, and odors which we perceive, but what could be the source of "greater than," of "twice," of "before"? In view of the fact that a given physical object could be both twice and half, both before and after other physical objects without internal change in any respect, the relations, whatever else they might be, could not be properties of individual objects in themselves. One way out of this would have been to admit that the external world consists of both terms and relations, but in that event a new conception of sensory apprehension would have had to be invented. For if apprehension is literally a grasping of something or other, an absorption through the end-organs of material stimuli, whether or not those stimuli resembled the sensory qualities which they caused there would obviously have to be something analogous to account for our apprehension of relations. And there was nothing. By reviving the theory of a mental act of relating, Kant was able both to be a subjective idealist and to have his objective, over-individual world. But the first act of the drama had to show that the very structure of the world was as subjective as the phenomena organized by that structure. That first act, however, leaves us each with his own world, his own phenomenal objects, his own private space and time. With the malice of a great novelist, trying to whip up a high emotional state in his readers, Kant plays upon the privacy of both the matter and the form of experience. He is an expert at logical sadism.

The second act of the play concerns the transcendental logic. In this he shows the sterility of thought without content and of content without thought, of representations, ideas, or sensory qualities without concepts, the logical framework into which they are fitted when we make judgments and inferences. His thesis is stated in the famous sentence, "Thoughts without contents are empty, intuitions without concepts are blind." The ways in which we handle our concepts are the procedures of logic, and the faculty which reasons logically is called by him the understanding. This is also, with modifications, the usage of Herder and Jacobi. Kant now attempts to expound the principles of all conceptual thought, regardless of its subject-matter. And again, as in sensory perception, he admits that we can think without knowing "elementary logic," just as we can perceive without knowing anything about the forms of perception. In fact, if we think at all, it will be according to the rules which are inherent in the operations of the understanding, just as if we are to breathe we must transform oxygen into carbon dioxide regardless of whether we know any chemistry or not. Kant thinks that he can discover the pure forms of thought without examining any particular thoughts. This is not supposed by him to be an empirical investigation and at the same time to be applicable to thinking.

The possibility of carrying out such an investigation is still a matter of dispute. There are philosophers today who maintain that they can intuit such beings as irony, despair, pure being, the comic, the good, the right, value-in-general, human nature, without having to consider any instances of them. It is not a question in their minds of what people call ironical or what they laugh at or what they desire or value, but what these "essences" are in themselves regardless of the human race. If there were no such essences, they say, how could we ever be right or wrong in what we say about them? Thus if there were no lions, how could we ever either speak the truth or be deceived about them, and why should not anyone be free to say whatever he wished about lions? It is clear that we do dispute about right and wrong, good and bad, the comic and the tragic, and if we dispute, do we not assume that there is some objective or nonpersonal way of telling who wins the debate? Again, we have men who maintain that there is such a thing as pure logic, which is neither arbitrary nor conventional, neither purely individual nor even generally human, but a "realm of being," to use Santayana's phrase, constructed according to its own rules and into which we enter from time to time, that is, whenever we reason properly. Some have even gone to the extent of assuming that there is a realm of subsistence peopled by negative facts, fictions, impossibilities, as well as by all logical possibles and whatever it is that verifies judgments. Husserl and Meinong, E. B. Holt and W. P. Montague in some of their moods, Russell in some of his, and Santayana all became involved in this question. On the one side of the argument is the apparent fact that even in order to be mistaken there must be something to be mistaken about. On the other there is the equally apparent fact that if all discussion is about empirical fact, the meaning of "ought," "must," "necessary," and similar terms requires revision. If then, to return to logic, the law of contradiction is simply an empirical generalization, there might be experiences to which it does not apply; and that seems absurd. If on the other hand, it is not empirical, what is it? Is it simply a tacit agreement on the part of the human race to follow certain rules, as if reasoning were a game? But in that case, why should we object so strenuously when some people decide not to play? If I prefer basketball to chess, why have I not the right to play basketball? Are the rules then inherent in the structure of a realm of truth, peopled by logical beings, Bradley's ballet of bloodless categories? In that case, by what laws are some minds excluded from entrance into it and why should there ever arise any argument over its laws? Why, again to take a commonplace and perhaps trivial example, should we add weights together to get total weights, and not temperatures? Do we discover this by gazing at the world of truth and waiting for a revelation of its rules? Such questions, as I say, are still moot, and we shall simply give Kant's answer to them here. That answer could be given with more confidence before the development of the non-Euclidean geometries, many valued logics, the discovery of the transfinite cardinals, to mention only a few of the disturbing innovations of our own time. Kant was living in a world still comfortable enough for self-assurance.

Kant approaches the question of general logic by asking the most sweeping question involved in the subject, What is truth? He assumes that "truth" has but one meaning, agreement of knowledge with its object, though he sees the difficulties involved in the term "agreement." Whatever "truth" turns out to mean, it must mean more than logical consistency if it is to be tested by its relation to any object. This commits Kant to a theory of factual truth. Moreover, it would look as if all true propositions were not only true *of* something—the universe—but formed a single consistent system. This was hardly a revolutionary idea, for we have seen that it even escaped the dragnet of Cartesian doubt. But it is an assumption nevertheless and not the result of a demonstration. Kant's belief in this assumption appears clearly in his view that logic must itself furnish the criteria of truth while telling us nothing about the content of knowledge. In his language it sets up "the negative conditions of all truth." If, then, we distinguish between formal and material truth, consistency being the former and "agreement with fact" the latter, we shall never find the whole criterion of truth in either one alone. We are back again in a situation which we faced when the question of sensory experience was raised. We can confront either that about which we reason or the forms of reasoning. But if we assume overtly or occultly that reasoning about the content of knowledge forms a completely consistent system of propositions, it will follow that this is possible only if the rules for setting up the system are universal. And that is in effect Kant's answer. If the only games we played were played with ordinary packs of cards, then a mathematician could easily figure out ahead of time what possible combinations of cards a person might hold in his hand, and he could do this according to the usual rules for calculating probabilities. Those rules would determine and limit the possibilities and, no matter how various the games might be, there would always be certain general principles holding good of them all. Such rules are inherent in, but not determined by, the material constitution of a pack of cards, by which we mean simply that there are fifty-two cards in all, four suits, two colors, thirteen denominations in each suit, a one-to-one correspondence between the denominations in each suit, and so on. A person who would argue whether the combinations were determined by the make-up of a pack of cards or by the laws of combinations would be arguing like a man who asked whether truth was determined by the content or the form of thinking. Kant in the transcendental logic is not concerned with the materials of thoughts, the colors, suits, denominations of the cards, but with the possible plays. But in the case of thinking, there is only one set of rules, for we do not play a variety of intellectual games each with its own rules. Hence he can require that when we analyze the process of thinking we must disregard (1) all empirical concepts, that is, such things as classes of birds, beasts, and fishes, and confine, for instance, our attention to the rules for classification; (2) all perceptual concepts but limit ourselves to "thought and understanding"; (3) all composite and derivative concepts, but should restrict ourselves to the absolutely simple, analogous to Descartes' clear and distinct ideas, which would be logically prior not merely in one system of thought but in all. In the fourth place —another Cartesian factor—we must be sure that our list of concepts necessary to thought is complete. But again, this would not be possible if truth were not a unique and universal system of propositions. It is this assumption, however reasonable and justified, that determines the outcome of Kant's thoughts on this subject.

Kant made another assumption that influences the outcome of his thinking: the assumption of the hierarchy of concepts. We are used to this in the classifications of botany and zoology, and, as we have seen, the revival of Neo-Platonism in the Renaissance made frequent use of it by insisting that all beings could be so organized. Concepts are represented in language by our abstract terms, including common nouns and adjectives. It had been argued, and Kant accepted the argument, that though we can see red things we cannot see redness; redness is a concept by means of which we name the color which is before us. The concept then is logically prior to the percept, whatever the historical relation between the two may be. Moreover it is always a unity, where the percepts subsumed under it form a plurality; redness, that is, is one; red things are many. But since one cannot make judgments, which are the elements of the understanding, except by means of concepts, the concepts unify the contents of cognition. There is therefore a possibility of unifying the concepts themselves into more inclusive concepts, so that eventually one could have those forms of judgments which are the only possible forms. At the outset Kant tantalizes the reader by setting down dogmatically a table of the kinds of judgments which the human mind is capable of making, reserving for a later page his justification of the four. We may judge in terms of quantity, quality, relation, and modality. We may say that all men are mortal, some men are mortal, Socrates is mortal, and then we are judging of quantity. We may say, Socrates is wise; Socrates is not a physicist; or Socrates is a nonphysicist, and then we are judging in terms of quality, affirmative, negative, or infinite. (For when we say that Socrates is a nonphysicist, we are not limiting the possibilities of what he may be.) We may say, All men are mortal, or if Socrates is a man, he is mortal, or Socrates is either mortal or immortal, and we are judging in terms of relation—categorical, hypothetical, or disjunctive. We may judge that Socrates may be an angel, or that he is certainly a philosopher, that in view of his conduct, nothing could be possibly expected except his condemnation. The first is problematic, the second assertive, the third apodictic, though my example is an empirical one. It is, I hope, obvious that any judgment may fall under all four of these headings at the same time, though not in the same respect. If I judge that all men are mortal, my judgment is universal, affirmative, categorical and assertory. So Kant's divisions are made to indicate four different aspects of judgments all of which may be present in any one judgment, as when a person says that a billiard ball has color, shape, weight, and size, and each can be distinguished for purposes of discussion, though not existentially.

Kant is only too glad to admit that his classification is to all intents and purposes traditional; his problem is to show how these four kinds of judgment can be shown to be the only kinds and the necessary kinds. As there were three forms of each kind of judgment, Kant then lists the concepts corresponding to each, which carries him a step further toward his dénouement. That dénouement appears in his deduction of the pure concepts of the understanding. The word "deduction" is the key to what he is attempting to do. If he can deduce the categories, then he will have shown that they necessarily follow from the act of judging itself and that they are therefore not simply taken over from textbooks on logic as from authority. They are to the content of judgments as space and time were to sensory qualities. Hence to exhibit them in all judgments is not to show that they are necessarily the forms of those judgments. It is the necessity which counts more than universality within any or all men's thoughts. For there is always the theoretical possibility that some time somewhere men might turn up whose thoughts did not operate in this manner. In a finite class a complete enumeration would be possible, and as one began an examination of thinking, passing from man to man, the suspicion would grow that what was found common to all the men so far examined would also be found in those not examined. But no matter how many fell under one's scrutiny, there would be no proof that the results must always be found. What is wanted is that which alone makes judgments possible, as space and time make sensible objects possible.

To reach his goal Kant first demonstrates that neither experience nor judgment would be possible at all unless there were a principle of synthesis, or unification, at work. Without this Hume's argument against the possibility of knowing the self would be conclusive and the whole of knowledge would collapse into a manifold of impressions and ideas. But we both perceive the world as an organized whole and whenever we judge it, we judge through bringing multiplicity into the unity furnished by concepts. To judge that the apple before one is red is not simply an apprehension of redness and of whatever the apple resolves itself into; it is first to put the object before us into a class, *apples,* which by its very nature is a single concept with a uniform set of traits, traits which are pervasive of all things classified under it, without which no object could be an apple, and it is also to unite with the concept *apple* a certain visual quality which again binds together several objects. When we use one of the categories of the understanding such as causality, there is not even a perceptual quality to help us and to give us the illusion that we are grounding our judgment exclusively on experience. To explicate the meaning of the concept requires a set of analytic judgments about the nature of cause, none of which is empirical and all of which are inherent to the idea of causality. Judgment thus becomes a synthesizing act on the part of the mind, which appears whenever we perceive objects or whenever we make judgments. The unity cannot be external to the mind, for out there are only separate and individual things or sentences such as the physical objects lying disconnected on a table top or a string of definitions in a dictionary. What the English Platonists called the inner light or an active sagacity of the mind, what Rousseau called *sentiment,* is called by Kant the transcendental unity of apperception. It binds things and ideas together, and Kant seems to think that it could not do this unless it were itself a unity. It goes without saying that it is not a thing; the technical phrase is the name of a fact: the fact that we actually do perceive things in a common temporal series and a common space, that we actually do synthesize a series of perceptual experiences into a single intuition, that we do organize judgments so that, as we say, one is implicit in the other. If this, however, were all that Kant meant, it might be simply an empirical generalization. And that would never serve his purpose. He means also that the reason why we have a consciousness of our own self-identity, in spite of Hume, is that as we synthesize the contents of our knowledge we are aware of our synthesizing powers always acting in accordance with the same laws. The unity of knowledge is conferred upon it by the mind's own unity. There is no schizophrenia in the cognitive subject, at least when it is using the pure reason. But when we ask for the other traits of the subject, we are frustrated. We know that it is one; but we know nothing further. Just as we are always confronted by the judicial operations of the mind when we face it. We are aware of its act, but not of the agent. We are caught between two unknown and unknowable worlds, that of what lies behind phenomena and that which judges and organizes phenomena. We are as ignorant of ourselves as of the real nature of the external world.

There might be some reasonable doubts about Kant's notion of unified experience and the doubts are not easily settled. Is it actually true that when we speak of, let us say, a material object we have done more than unify it verbally? In what sense of the word do we actually perceive a colored, sonorous, mobile object, a bird, as one? Is not the unity which leads us to call it a bird, that is, by a single name, a fiction? Do we really perceive it as one or as a collection of sensible properties closely associated in space? We know, if we know even the rudiments of science, that the color is the effect of those light rays which are reflected from the object, that the sound on the other hand is produced by air-waves, and the two are entirely different things, different not in the sense that they are not waves, but in the sense that air waves are not light waves. The "it" which reflects and emits the waves is a scientific residuum which is never seen or heard and in the last analysis is a collection of electrical charges whirling about in empty space. When common sense distinguishes the sonorous object from the visual object, as it does even in daily speech, it is certainly not synthesizing color and sound into a unit. Again when we say that a given assertion is implicit in another which is logically prior to it, do we and should we mean more than that if the latter is true, so is the former? In an Aristotelian syllogism, the premises were supposed to be the conclusion *in potentia*. The conclusion was, one might say, preformed in the premises. But we know that there is an indefinite number of premises which will imply any conclusion.[8] Once again Kant's assumption that truth is a single system of theorems all of which are exfoliated from one is determining his point of view. However, in his defense it must be said, as we have said about so many other philosophers, he was making assumptions common to his time. There is also the doubt whether the unified object of perception does not vary with our pragmatic interests. For many purposes, not merely those of scientific investigation but those also of commerce, the weight of an object, and not its color, shape, sound, odor, or taste, determines its unity. But this unity, though perceptual in the sense that we read the weight off on a scale, is not perceived as weight. We perceive weight through lifting things, "hefting" them. In what sense of the word is the feeling of strain in the muscles of the arm a perception of objective unity? But again, we are demanding of Kant answers to questions which he did not raise. It was self-evident to him that chairs, tables, trees, and stones were always thought of as single substances with a variety of attributes; the attributes came to our minds in separation from one another through different sense-organs; the unity therefore could not come from sensation. The transcendental unity of apperception, which functioned as the common sense functioned in Aristotle, was needed to explain the unification—synthesis—of this sensuous variety.

By a reversion to the tradition of faculty-psychology, Kant distinguished three separate "subjective sources of knowledge": sense, imagination, and apperception. The first obviously presents phenomena to us immediately, the second associates and reproduces ideas, the third recognizes or identifies the phenomena with the objects for which they stand. It is the third which makes unified knowledge possible, and its requirements will determine the whole structure of a cognitive system. To paraphrase the matter, if there is a single knowing subject, the mind or the Ego or what you will, and if it is always self-identical, it will perforce always judge in accordance with its own principles. It cannot derive its principles of judgment from anything else, for such principles are the form of knowledge and not its matter, and only the content of knowledge can come to us from the external world. These principles must be its principles but, since they are constant or invariable, judgments made in accordance with them will be necessary and at the same time synthetic. We can see the plausibility of this if we take an example of the limitations of our knowledge. We cannot hear sounds if air-waves are of a frequency less than fifteen and more than forty thousand vibrations per second, just as infra-red and ultra-violet light-rays are invisible to us. Hence a world in which there was a gap between the perceptible limits of either sound-waves or light-rays would necessarily be silent and invisible to us. We should then have to construct a science in which neither of these features of our ordinary world are present. Questions about color and sound would be as meaningless as questions about the colors of the ultra-violet rays which are perceptible to bees. A world which was colorless and silent would still be a world, and we could develop a physics of solid, mobile, gustatory, olfactory objects. But if we were to imagine ourselves stripped one by one of our usual normal perceptions, we can see that the kind of judgments we would make would be limited by the range of our perceptions. If then we were to become Condillac's statue with only the sense of smell, our physical world would have to be interpreted in terms of smell, and the physical world would become evanescent and fleeting, as odors are, and it is even likely the physical laws would have to be expressed in terms of qualities. This is all fantasy, to be sure, but a fantasy which may illustrate how the character of the human mind may determine the necessary judgments which it will make of the world. A purely olfactory world could not have any stability unless there were a constant perception of some odor, for, since there would be no other sensations than olfactory ones, we could not even have an idea of substance to which odors could be attached. The odors would be the only substances which we could know and they would not be substances in the sense of something which has qualities. Moreover, the universal laws in terms of which we should describe—or organize—our olfactory experiences would have to be those which we found illustrated in odors, laws of duration, of quality, of intensity. If we assume that all odors have at least these dimensions, then we should believe these dimensions to be independent of the human mind. For Kant that is the procedure which we use in projecting the categories of the understanding into the external universe. They are our tools for understanding it, not characters of it which subsist independently of human thought. Thus they are on a plane analogous to that of the forms of perception. The similarity of this to the theory of Reid and the later Biran should be obvious, though in both the demonstration is much less detailed and thorough than in Kant,

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[8] Logicians will not need to be told that I am simply saying that given a statement, an indefinite number of other statements can be found, some true, some false, from which it can be inferred. If we start with premises, clearly only some conclusions will follow. But that is a different matter.

If both the categories of the understanding and those of sensory perception are projected from the mind into the world, then all that is left is appearances. These appearances, or phenomena, are appearances of something, and that of which they are appearance is called by Kant the *noumena,* things as they are. Why there should have been any things-as-they-are or things-in-themselves is puzzling. Kant used them as a cause of the phenomena, for he seemed to feel that phenomena had to be appearances *of* something. But in the first place, it did not take long for his successors to see that if causality was simply one of our human ways of interpreting things, it could apply only to phenomena and not to *noumena;* and in the second place, since human knowledge is confined to phenomena, we could not know whether there were any noumena or not. To reason to their existence required that the procedures of reasons be objectively applicable, but the noumena could never be the objects of reason. Indeed the famous antinomies of the pure reason were set up by Kant to show that when one is trying to deal with the real world, in the sense of the nonphenomenal world, one could always prove both contradictories about it. I assume that Kant's reason for believing in a world beyond appearances was a combination of what was apparently implied in the word "appearance," and the tradition of inner natures.[9]

The answer to the question with which Kant started his inquiry, how synthetic *a priori* judgments are possible, is that of the English Platonists: that we furnish both the syntheses and the necessity through the inescapable methods by means of which we make our judgments. The universality of these methods prevents us from noticing their subjectivity and at the same time makes it possible for us to apply reasoning to the world of experience. As principles of thinking they do not constitute experience, for they could not be derived from experience, but they regulate and order it. By their very nature they could not pierce the perceptual screen, and when we are worried about what lies beyond that screen, our pure reason is helpless to give us the answer. It was this feature of the first *Critique* which made Kant seem more of a sceptic than he really was. When he points out in the first section of the "canon of pure reason" that we should like to have rational proof of the existence of God, the freedom of the will, and the immortality of the soul, and yet cannot have it, it looked as if he were denying the truth of all three beliefs. Rationally, that is, scientifically, since we are on the level of phenomena, we are forced to conceive of everything as strictly caused, so that freedom is impossible. As for the soul, our conception of it as incorporeal and thus immortal is worthless since the very concept of incorporeality is negative and tells us merely what the soul is not, not what it is. From the assertion "Corporeal things may be destroyed" one cannot logically infer that incorporeal things are indestructible, any more than from the assertion "Red objects are visible" one could infer that nonred objects are invisible. We may again believe in "the existence of a highest intelligence," but we could not use it to infer anything in particular about the world of science. We could not attribute causality to God in the sense that we attribute it to things, since God is not a thing like His creatures. These three beliefs, and Kant does not deny that we have them, can tell us nothing about the world of experience, nor can they be derived from it by the methods of the pure reason. They are, as he says, probably of practical value, and he was to change the adverb "probably" into "certainly" in the second *Critique.* It was to be shown that the practical reason had powers which the pure reason could not have. But of that more later.

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[9] This is not merely an assumption. See the preface to the second edition of the *Critique,* where he speaks of "the absurd conclusion that there is phenomenal appearance without something that appears." F. Max Müller's tr. (London: The Macmillan Co., 1949), p. 698.

In the preface to the second edition of the *Critique of Pure Reason,* Kant sums up in one phrase the accomplishment of the book. Whereas all previous epistemologists, he says (falsely), had supposed that all knowledge must conform to objects, he was going to make the experiment of supposing that objects conform to our modes of cognition. This was his Copernican Revolution. The effect of this revolution was to open the way for nonintellectual accounts of reality, since the realm of the intellect was definitely circumscribed. Kant, at least when he wrote his second edition, had no intention of denying men's rights to believe, but he still denied them the right to believe on rational grounds. He thus freed Jacobi's *vernunft* and Hamann's insight from the strictures of science and permitted them to enter a world of transcendent beings undisturbed. How he himself entered this world will be discussed in the following chapter. Meanwhile it was clear that if the pure reason could not penetrate the secrets of "reality," science, which had to utilize the pure reason, was confined to the phenomenal world. Its truths became surface truths and the divorce between science and philosophy seemed to be final. Whether this divorce was a misfortune or not depends of course on what one expects from philosophy. But certainly during a large part of the nineteenth century fantastic theories and systems were developed which would have profited from the strict discipline that scientific training would have provided. It seems to at least a few philosophers that neither philosophy nor science can proceed in isolation from one another. Science needs philosophic examination of its methods and assumptions; philosophy needs the established facts that science alone can furnish. A philosophic criticism of scientific procedures has always been beneficial to science; scientific hard-headedness has always checked the exuberance of the philosophic imagination. Men like Galileo, Laplace, Buffon, Lamarck and, in our own day, Einstein and Whitehead, were as philosophic as they were scientific; and, on the other hand, Descartes and Leibniz could be classified among scientists as properly as among philosophers.

CHAPTER 15

Kantian Ethics

THE clash in opinion among epistemologists of the eighteenth century was paralleled by a similar clash in opinion among ethicists. On the one hand there were philosophers like Shaftesbury, Hutcheson, Hume, and the Benthamites who found grounds for moral obligation in the world of experience, seeing no need of supernatural authority. Roughly such men could be called moral empiricists, ambiguous though that term undoubtedly is. On the other hand were the English Platonists who, though they believed that the moral sense was innate, nevertheless also believed that it emanated from God. The former group held the common belief that a philosopher could discover not only the grounds for moral obligation in the facts of human nature but that the good itself was discoverable in the same area. The latter knew that the good was the traditional set of virtues prescribed by divine law and at the same time maintained that our sense of goodness carried with it a feeling of obligation to obey that law. On the continent the same conflict existed. The *philosophes,* whatever their disagreements might be on the question of materialism and atheism, were in general agreement about ethics. To follow Nature was, in fact, to follow the commands that all Christendom had followed for centuries, but the reasons why they should be followed varied. Happiness was a term that appeared in the writings of all but the Jansenists, but what happiness consisted of was a matter of dispute. Those men who thought of the human mind as a compound of elementary sensations were driven to find in sensations a distinction between good and evil, and the most obvious distinction was that between pleasure and pain. But men like Rousseau emphasized the possibility of licentious hedonism if pleasure was to be pursued and pain avoided. Like the English Platonists, Rousseau knew by inner conviction that the life of pleasure was bad. Conscience was a better guide than desire, and it never seems to have occurred to Rousseau that a man habituated to pursuit of pleasure might be just as conscience-stricken when he slackened in its pursuit as the most convinced Puritan. In Germany the conflict was never so marked as in England and France. Sensationalistic empiricism does not seem to have flourished on Lutheran soil any more vigorously than on Catholic. And the German philosophers when they turned to morals were more likely to seek a justification of traditional values than a new set of values. Kant himself, though no authoritarian in ethics, nevertheless came out of the labyrinth of his research with the same goods he went in with. In fact, the most puzzling thing about ethics has been that all ethicists, with the exception of Schopenhauer and Nietzsche, seem to know what is good and what is bad before they begin, so that their debates are seldom more than debates about the substantiation of their knowledge. Few hedonists, if any, have ever been willing to say both that pleasure is the only good and that men ought to seek pleasure, whatever the temptation to do otherwise. One suspects that the residues of Christian and Jewish morals were too powerful to be cast away.

In this chapter we shall discuss a typical "empirical" ethics, that of Shaftesbury, and a typical nonempirical ethics, that of Henry More, and conclude with Kant's solution of the difficulties involved in the conflict. I do not mean by this procedure to do more than present sample views. It would be impossible to trace a thorough history of ethical theory in a volume of reasonable size and include much of anything else. Since Kant is one of the main sources of nineteenth-century ethics, it has seemed wiser to emphasize his views and to present those of his predecessors and opponents as types of those ideas which he was either combatting or developing.

1. Shaftesbury

The main work of Shaftesbury (1671–1713) which we shall consider is his *Characteristics of Men, Manners, Opinions and Times*, published in 1711, since it is a collection of several of his writings.[1] The first work of Shaftesbury's which is of interest to us is his *Inquiry concerning Virtue*. This work has as its purpose the discovery of "what honesty or virtue is, considered by itself; and in what manner it is influenced by religion: how far religion necessarily implies virtue; and whether it is a true saying, That it is impossible for an atheist to be virtuous, or share any degree of honesty or merit" (*ed. cit.*, ch. i, 7). This is the old controversy which we have seen before, and Shaftesbury's conclusion is that the spheres of religion and of morality are two, not one, that there are believers who are immoral and infidels who are moral. The argument is constructed on a distinction between the good of the whole, or of the cosmos, and the good of the parts. The former is beyond certain knowledge, the latter well within our grasp. For every creature has a natural end which is its good and which is determined by its makeup. Such ends are determined, not by its individual constitution, but by that of its species; so that as long as he pursues the good of his species, he will also be pursuing his own good or interest. The specific good, as contrasted with the individual, is a revival of the Greek notion of *areté* or excellence which could never be attained by any individual's moving centrifugally, setting up his own desires, rather than those of his kind, as his goal in life. The ethics of the major Greek ethical schools was based on the identification of class-concepts with the ideal. Thus if man were to be defined as a rational animal, rational animality was the standard by which one would estimate the excellence or virtue of any individual man. Shaftesbury is clearly following that lead.

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[1] The edition which I use is the 6th, published in 1737. I have modernized the spelling.

The question thus becomes one of examining the ideal itself, to which he gives the name of Goodness or Virtue.[2] But since the whole cosmos forms a single system, nothing can be judged in isolation from the system, for when an individual or a species is so isolated, one of its essential functions is overlooked. With a somewhat acid objectivity Shaftesbury points out that the fly must be judged in relation to the spider for whose web its wings are so perfectly suited, and presumably its muscid excellence would be distorted if its power of nourishing spiders were forgotten. Men are not judged as appropriate food for the worms, but nevertheless if any individual is pernicious to the rest—and Shaftesbury does not specify whether he is talking about the entire remainder of the cosmic order or the other human beings—then he must be thought of as a bad man. But men cannot be either good or bad except by their affections—that is, their emotional attitudes—and it follows that an investigation into the good and natural and the bad and unnatural affections must be initiated. If a man is forced into evil acts or prevented from doing them, he is neither bad in the first case nor good in the second. He must want to behave in a given way before he can be judged.

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[2] It may not be too pedantic to point out that Goodness corresponds to the Greek term, *areté*, excellence, and *virtue* to the Latin *virtus*. But *virtus* etymologically is *manliness*, that which makes a person more of a man and less of a beast. The equivalence of the two terms may not be as obvious as it should be.

A given individual can of course have two sorts of interest: those which arise without regard to his species, or self-interest, and those which do. The former are unnatural in the sense that the man possessed by them overlooks his natural association with his fellowmen. He is by nature essentially a social animal. But this does not mean that his interest in self-preservation is unnatural, for by preserving his life he is also preserving the species. A proper balance has to be struck between self-good and the good of the race, and one knows when the balance is upset simply by noting the probable effects of an act or of the fulfillment of a desire. A man should always act through affection for the race of men, for in that way selfishness will be avoided, selfishness which alienates an individual from the race. A natural desire is by logic a desire for the good of the species to which one naturally belongs, not simple love of other individuals. It is important to see this, for otherwise one does not see the relevance of Shaftesbury's notions to those of Kant. "It may," he says (*ibid.,* ch. ii, 27), "be necessary perhaps to remark, that even as to kindness and love of the most natural sort (such as that of any creature for its offspring) if it be immoderate and beyond a certain degree, it is undoubtedly vicious. For thus over-great tenderness destroys the effect of love, and excessive pity renders us incapable of giving succour. Hence the excess of motherly love is owned to be a vicious fondness; over-great pity, effeminacy and weakness; over-great concern for self-preservation, meanness and cowardice; too little, rashness; and none at all, or that which is contrary (viz., a passion leading to self-destruction) a mad and desperate depravity." The measure of extremity is the effect upon the race, and when an individual, even one's own child, is singled out from the race for our benevolence, we may be acting badly.

Any creature in the cosmic order may be thought of as good or bad, but virtue is attributed only to man. Man differs from the other animals in being able to form abstract ideas, and thus we are not dependent upon sensations and emotions for action. We can deliberate and choose as a result of our deliberations. We can see the moral beauty and deformity of behavior and thus act in a way which no other living being is capable of. It is at this point that Shaftesbury's famous notion of a moral sense enters the discussion. As early as 1709, in his *Sensus Communis, an Essay on the Freedom of Wit and Humor,* he had insisted that the very zeal which men exhibit in propounding and debating ethical theories proved the presence of a moral sense (*op. cit.,* Bk. I, 92). And in the *Inquiry* he makes the analogy between our moral and our aesthetic senses. As the mind feels an aversion to the disagreeable, the foul, the dissonant in works of art, so it does in human behavior in general. But this does not mean that the moral sense is simply a snobbish dislike of bad manners, the shudder of horror which a gentleman might feel when he sees an acquaintance wearing the wrong tie or shoes. The moral, like the aesthetic, sense accompanies reflection and judgment. We cannot simply see the effects of conduct or the motives which stimulate it. We have to examine and pass judgment. No automatic or reflex action can be morally relevant. Morality springs from purpose and purpose must be directed toward the well-being of society, since the individual insofar as he is a subject for ethics is simply a member of a group. "And thus we find how far worth and virtue depend on a knowledge of right and wrong, and on a use of reason, sufficient to secure a right application of the affections; that nothing horrid or unnatural, nothing unexemplary, nothing destructive of that natural affection by which the species or society is upheld, may, on any account, or through any principle or notion of honor or religion, be at any time affected or prosecuted as a good and proper object of esteem" (*ibid.*, ch. iii, 35). The moral sense as a feeling is then simply an indication, a signpost, which may lead us to virtue but which in itself does not constitute virtue. We may have a feeling of approval which is wrong and which must be proved wrong by rational means, or which may be right and which again demands proof of its rightness. One could not err more profoundly than by attributing to Shaftesbury a superficial aestheticism.

For just as tradition held up the dictates of conscience as a guide to virtue, he is looking for a natural guide which will take the place of conscience. He will not accept an innate idea of right and wrong, since he probably saw the fluctuations of human opinion and the conflicts which arose among men from these fluctuations. He will not on the other hand accept reason unsupported by feeling, for he probably knew that morals were not simply an expression of theorems attained *more geometrico.* He wanted to justify our love of virtue, our hatred of vice, in order both to justify the feelings of a gentleman and the charity of the simple. He saw that in any moral situation there is likely to be a struggle to see the better and pursue it, that we are not gifted with the talent of always doing right. To sin in ignorance is like being virtuous in ignorance; both are to be condemned. In fact, sinning in ignorance to him is impossible, for the virtues and vices belong to a plane of discussion on which there is consciousness of one's purposes and of their possible effects as well. He wants our passions to be subjected to the reason in the sense that when we know the truth we will love it. He is thus neither a voluptuary nor an apathetic rationalist. Even the ruffian, he says, who is faithful to his gang and "rather than betray them, is content to endure torments and death," has some principle of virtue (*ibid.,* ch. iv, 39). Virtue, one concludes, is the happy agreement of reason and emotion.

If this be so, then belief or disbelief in the existence of God is irrelevant to ethics. The moral sense arises out of our social nature, not out of a set of theological or other principles. The latter may change them by inducing us to form new habits and hence new compulsions, but originally we have a kind of sympathy with our species, however rudimentary, which depends exclusively on our nature as men. Shaftesbury is far from denying that religious beliefs may change our natural sense of right and wrong, for we will be inclined to emulate the behavior of our gods. Even if a man begins through fear of his divinities to follow in their footsteps and does so in spite of his natural dislike of doing so, it is admitted that he will acquire the habit of continuing to do what he has begun to do from fear. So if one worships a god who is a model of kindness and benevolence, one may also be induced to follow his example, but neither belief is necessary to morality. The effects of such beliefs are accidental. Religion in itself is capable of doing both good and harm and hence atheism will do no more moral harm than superstition. This is the logic of the situation, though Shaftesbury concedes that there are more moral dangers psychologically involved in atheism than in theism.

What he would like above all else is a man who acts from right feeling rather than from reasoning. His ideal is apparently *l'honnête homme,* the gentleman who does not have to reason out the rights and wrongs of each case but knows, as we are likely to say "instinctively," what to do. He thinks that this kind of moral knowledge can be developed out of the moral sense with which we as social animals are born. The moral sense can be perverted, but it need not be. He realizes that public education and legal restraints are necessary to produce the gentleman. What he tries to avoid is an ethics based upon fear of punishment or hope of reward, or an ethics which is simply a set of commandments issued from an authoritative source. If we have a feeling of regard for our fellows and for a social good which transcends our pure self-interest, we ought to be able to extend it to cover all our fellow-men; then, when we succeed in doing so, we shall have a set of standards that will be rational as well as intuitive. Our reason will justify our intuitions. And since action never springs from reasoning but always from passion—that is, feeling or desire—we must cultivate those passions which will lead to virtue if we wish to build a society in which virtue will flourish.

2. More, Rousseau, and the *Moi Commun*

The development of Shaftesbury's theory by such men as Hutcheson and Adam Smith—for Smith's theory of sympathy was closely allied to Shaftesbury's theory of the moral sense—Hume's refinements upon it, and the emergence of a more unified system in the work of Bentham cannot be traced here. Shaftesbury attempted to solve the double problem of the authority of our individual impulses and the obligation to control them. The immediate source of anyone's consciousness of an ethical problem seems to be a person's feeling of guilt or his occasional surprise at being praised. We should have no feelings of guilt, as far as one can see, if one's actions were neither praised nor blamed, though one might feel a certain resentment against nature and one's fellows when a plan of action was frustrated. Whatever the explanation may be, men do feel obliged to do certain things which they are not eager to do and to refrain from doing others which they are eager to do. For Shaftesbury that feeling of obligation was as inherent a part of human nature as any other, and it arose from the simple fact that man was a social animal with social feelings. The tendency on the part of his successors was to consider man in isolation from society and to construct society out of individual units which in essence were not social. Thus when the hedonists maintained that men always sought their own pleasure, assuming that they knew where to find it, they might have hit upon a psychological fact of some importance, but they could not derive from that fact anything more extensive. They could assume that man ought to do what he does do. But in that case they would have to explain why men are morally wrong in not seeking pleasure. It is common, to be sure, for most ethicists to approve of the traditional values and standards of value. But almost all such values involve other people. As the nineteenth century grew old, men became more and more aware of their dependence on others, not merely for their living, though that was not of minimal interest, but for their enjoyment of living. The unexamined value of common sense, health, money, learning, the arts, are all so intimately bound up with the existence of other people that isolation became a goal rather than a starting point. We who are only too conscious of our dependence on others feel their presence as almost overpowering. We long for solitude, and the sojourn of Robinson Crusoe on his uninhabited island seems an ideal. Shaftesbury and Adam Smith seem closer to us perhaps than Hobbes or Locke. The issue is not that between the egoist and the altruist, but, if we may abuse common terms, between the individualist and the socialist.

The argument still rages in the schools on the problems of where we are to find our moral authority and how we are to translate fact into value. Since some things that are, are wrong, philosophers could hardly follow Pope, and one way out of the difficulty was to place the source of our moral judgments within our own minds as innate ideas. So long as there existed a sharp distinction between external and internal experience, and so long as external experience could provide us only with facts, the values had to be relegated to internal experience. If they could not be acquired, they might be inborn. It will be recalled that the English Platonists believed in innate ideas. And both Cudworth and More not only placed among the innate ideas our mathematical and logical laws but also our fundamental moral precepts. Henry More in his *Enchiridion Ethicum* (1666) [3] knows precisely what these precepts are and gives us a list of twenty-three of them. They are, he says (*op. cit.,* Bk. I, ch. iv, 2), immediately and irresistibly true and need no proof. I shall not list them all but merely cite enough to illustrate his technique. One must of course ask oneself just how irresistible they are. They are not verbal definitions of goodness or virtue, indications of how he himself is going to use words, but factually true. The first of these *noemata* runs as follows:

> Good is that which is grateful, pleasant, and congruous to any Being, which hath life and perception, or that contributes in any degree to the preservation of it.

This may be so, but what reason is there to believe that it is an innate idea irresistibly and immediately true? Are not many of the evils which traditional ethics condemns those things which are grateful, pleasant, and congruous to a being? The pleasures of the flesh are all of these, and in the case of sexual pleasure no question could arise of its congruity to the being indulging in it. In fact, one can think of many moral commandments which urge a man to disobey the impulse to seek pleasant and grateful experiences regardless of their congruence with his being. Again, with regard to the third *noema,* although among the several kinds or degrees of sensible beings in the world there are some better and more excellent than others, no one would be willing to doubt that we like some things more than others even at birth; but that they are in themselves better than others is just as indubitably something which has to be learned. Much of our moral education consists in discovering how to choose between the things we like. But to More the hierarchy of values was as rooted in the nature of things as qualitative differences. The fusion of values and facts was inherited by him from the whole Platonistic tradition. One need not argue about the truth or falsity of this philosophy, but one can surely point out that it is far from being an irresistible truth.

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[3] I use the facsimile of the English version of 1690.

The advantage of the theory of innate moral ideas, as outlined in the twenty-three *noemata,* is that by listening to the inner voice we need never go wrong. And since the voice speaks in the same terms to all men, a universal set of moral values is established. Man had always seemed like an unnatural animal to philosophers and his unnaturalness in this context was shown by his moral errors. The other animals were supposed to be more faithful to their natures in that general laws descriptive of their behavior were possible, and books in praise of the beasts never failed to point this out. In fact, the main argument for their lack of individual reason was the uniformity of their conduct. It seemed easy to speak about the behavior of *The Elephant* or *The Ant* as if they were perfect incorporations of Platonic ideas. Throughout the Middle Ages the bestiaries had drummed into the heads of the reading public that most of the beasts were symbols of moral traits, the fox of cunning, the lion of bravery, the stork of filial affection, the dog of fidelity, the pelican of parental devotion, and so on. One wonders at times at the credulity of people who might have seen that animals have their differences and, though Europeans may have had little occasion to observe the chaste elephant or the maternal pelican, they could see dogs and storks almost daily—and if there is one thing clearly observable about animals, it is precisely their individuality. But if one is assured that the fundamental law of nature is the homogeneity of a species, obviously any heterogeneity will seem unnatural. But men were incorrigibly heterogeneous in those fields which were of primary interest to the ethicist. Hence the discovery of universal laws would prove a corrective to this. If the universal laws could be found in man's conscience then the moral appeal could be made, not on the authority of either God or the state, but on that of an individual's own nature which would turn out to be human nature. Man's unnaturalness would lie in that area of individual difference which could be repudiated by any man of good will. The *Boniform Faculty,* as More called it, is alike in all of us.

But since God to him is not only the most real being but also the essence of goodness, the Boniform Faculty is proof of our kinship with God, and since it operates not merely as a sentiment of what is right but also as reason, its operations lead both to wisdom and to felicity (*ibid.,* 28). For More one does not reason to moral decisions; one knows the right decisions without reasoning. But, at the same time, the correct moral decision is always capable of being justified by the reason. There is a coincidence between our innate moral ideas and reason, just as there is between our innate logical ideas and reason. We do not and indeed cannot prove—that is, deduce—the law of contradiction; when we reason, we have to use it. It is innate in the sense that it is a formulation of the way in which correct reasoning proceeds, and one does not have to be conscious of it in order to reason correctly. The same is true of moral principles. Every choice, whether good or bad, may be said to be an unconscious recognition of the *noema* that some things are better than others. The demonstration of a thing's superiority will be made by reason, not by choosing. There is, to be sure, something paradoxical in a Platonist's putting so much price on the operations of a faculty which to Plato himself would have been nothing more than right opinion. And if More had stopped at this point, he would not have been even a good Neo-Platonist. Since we are made in the image of God and since God is reason as well as love and goodness, we cannot fulfill our role as His children until we act reasonably. The analogies between the Boniform Faculty and Kant's Categorical Imperative will, it is hoped, appear below.

At the risk of redundancy, let us insist that the central problem of a universalistic ethics is the discovery of some unique source of obligation that by its very nature will not vary either with the differences in individual characters or with local institutions such as laws or customs. Traditionally, this has been essential human nature itself, the commands of God, common sense, or Nature in one of the many senses of that term. Each of these sources will give rise to demands that the individual conform to overindividual standards of behavior. "To thine own self be true" would be senseless unless it were believed that one's own self was a concealed self like everyone else's self—concealed, that is, under a superficial layer of random desires and caprices. The problem could be redefined as that of self-denial rather than self-assertion. The value of the theory is the a priori character of the ethical standards. For More, as for many of his predecessors, man is a combination of animal and human traits. Moral error is the pursuit of one's animal nature instead of one's human. Moral truth consists in a logically consistent set of propositions which are an indubitable set of truths for the very reason that they are an expression of man's humanity and his humanity is his intelligence. That is why he can say (*ibid.*, 30), "This is the plain character of the intellectual life, that as in the search of truth, it is not inquired what may seem true to any one body of men, though ever so numerous, much less to any man in particular, but what is simply and absolutely the truth: so neither doth it set up that for good, which to any one man, or to any number of men, appears for such; but that which really and absolutely is so; and which, in like circumstances every intellectual creature is bound to elect, be the animal nature never so averse." But if one were to turn on More and remark that human nature is neither intellectual nor animal alone, but intellectual animality, and that moral problems arise because of the intermingling of our two natures both of which exist as integral parts of a whole, he would simply reply that variable characters could not be essential characters and that animal traits are variable, the intellectual constant, their constancy being proved by the uniformity of logical principles.

The uniformity of human nature, which More saw in the set of our innate ideas, was seen by Rousseau in the *moi commun,* the general will, and the *sentiment.* As in More the individual was in a state of conflict, and when he speaks of the natural man he is usually referring to what man is by nature; namely, a being who knows right and wrong, truth and falsity when he listens to his heart, but whose innate knowledge is obscured by social traditions. Rousseau's individualism is a protest not against the social or even the common nature of man. He does not envision as his ethical authority a collection of human beings all dominated by self-centered interests and hence at war with one another. On the contrary, men are at war with one another because they do not listen to their true nature which, as in both Shaftesbury and More, is at peace with that of all men. The search for the natural man did not end with the solitary anthropoid wandering about the woods in search of food and a temporary mate; it ended with those men who were integrated into a social community, the interests of which were identical with those of the individuals integrated into it. If he did not continue the search until he came to man as the image of God, it was because, as he frequently said himself, he did not believe in the possibility of attaining ultimate truths. This has sometimes been attributed to his Protestant background. But it is more reasonable to say that he was looking for ethical principles which would be natural rather than supernatural. His idea of human nature, when he was writing books about it and not acting as Jean-Jacques, was to be sure a dream, not an historical fact. But it was a dream which he thought could be made real through education. One needed no metaphysical apparatus to justify it. One had simply to ask oneself what would be the best life and the answer would emerge automatically from one's heart. The Revolution proved that he was not alone in seeing, for instance, capricious government, the inequalities of wealth and prestige, luxury, and superstition as evils. But if one examines merely one of these supposed evils and asks oneself why it is evil, one comes ultimately to the answer that no individual is inherently superior to any other. This was a flat rejection of the hierarchical concept of nature. There may be no logical bond between a hierarchical cosmos and a hierarchical society, but there is certainly an historical and probably psychological bond between them. As early as Pseudo-Dionysius the economy of Heaven had been plotted as a series of levels, and whether the one author is responsible for all the books on the subject or not, the heavenly hierarchy was accompanied by a terrestrial and an ecclesiastical hierarchy. The cosmic plan of Plotinus was reproduced in heaven, on earth, in the Church, and one's position in the scale of being determined one's inherent worth.[4] To be able to see all men as somehow equal in dignity demanded a scrutiny of human nature that would penetrate the obvious inequalities of intelligence, education, rank, wealth, power, physical equipment, and so on. Rousseau found it in each man's worth, and he then had to find some way of expressing one's moral worth which would not rest upon a foundation of intelligence, wealth, rank, and the other things which were unequally distributed. The heart proved to be just what he wanted, since it could speak to anyone who would listen. If it meant rejecting all the accumulations of history, then so much the worse for history. Such massive renunciations had been preached before. The words of Jesus Christ or of St. Francis of Assisi were not novelties, though each time they are repeated they seem revolutionary. But Rousseau's heart could speak without having first been instructed. That was one reason why it was so dangerous.

From the ethical point of view, the *Social Contract* told its readers that the individual's only chance of redeeming himself was in losing himself. The most complete fulfillment of his own ideals was in following the general will. The general will, it will be remembered, can do no wrong since it is an expression of the right. It is Duns Scotus' God, Machiavelli's Prince, and Hobbes' sovereign socialized, and in it we all are fused into one. Our alienation from it is, one might say, original sin. But the whole theory could be translated into words which at first hearing might not seem equivalent at all. It could be phrased as the theory that there is a rule of conduct which is common to all men because it expresses that which is essential to human nature, which has authority over all men because without it each would be a wandering mass of flesh and bones without purpose or moral standards. One could by a process of abstraction and generalization arrive at the common nature of man, but there was no logical bridge that Rousseau could find between man's common nature and his obligation to obey its commands. As in all cases where one tries to move from fact to value, here too a postulate was needed to turn the common nature into a standard of goodness. An opponent might retort to the postulate that if man ought to be what he really is, then it becomes absurd to correct his real conduct. But Rousseau, like most moralists, including Kant and even Plato and Aristotle, believed that men are not always what they really are. Their accidental traits come into conflict with their essential traits, as when instead of acting from the motives of reason, we act from the motives of passion. In traditional Christian thought essential humanity was, if not completely lost, at least diminished by the Fall. If Adam was created perfect, he lost his perfection after yielding to the Serpent's temptation. To Rousseau the loss of man's essential humanity was attributable to his yielding to social prejudices. And in Kant the moral will was impeded by the phenomenal self. All thinkers who maintained that man as he is is no longer man as he should be, or as he was intended to be, or as he was created, were in agreement on the dual nature of man. Some, however, like St. Augustine, maintained that there was no natural way of returning to his original perfection and that only the Grace of God could perform this work. But Rousseau and Kant maintained that no supernatural aid was needed. One had to recognize one's essential nature and by an act of will reject the accidental. In that they were following Shaftesbury.

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[4] The emphasis on the ecclesiastical hierarchy is maintained in the *Enchiridion Symbolorum* in the *Index Systematicus*, IIa, where authority for it runs from St. Clement to Pius X.

When one asks why Rousseau then picked upon a nonrational faculty as the authority for moral judgments, the answer is that no rational procedure could discover values. The reason might of course lead men to those things which are believed to be valuable, but the reason why they are valuable is based upon an assumption. Moreover if moral standards are to be binding on all men, regardless of their education or rank, they must be discoverable by some faculty which is possessed by all men. Not even Rousseau could seriously maintain that the peasant was endowed with as gifted a reasoning power as one of the *philosophes*. But since he had no high regard for reasoning power, as we have seen, he looked for the moral sense elsewhere. Everyone, he maintained, whatever else he might lack, has a sense of right and wrong, of justice and injustice, of goodness and badness. That sense requires no rational substructure, no theorems, no proofs, no factual evidence. If it did, it would not be universally found. And since, because of man's dual nature, people could turn a deaf ear to the dictates of the moral sense (*le sentiment*), it was not wondered that men do so. I do not mean that any such thinker ever explained why the temptation to be bad was so much greater than the temptation to be good. I simply mean that it is not to be wondered that a possibility is realized. In Rousseau there are probably more good people than bad, since he looks to the simple countryman as his model of goodness and is really attacking the sophisticated urbanites of his times. He left things in a state of confusion; but it would be hard to deny that he put his finger on an ethical problem which required more attention than it had received. Either men had to be accepted as they were, with all the conflicting ideals, or some way must be reached of harmonizing human nature. If one took the first alternative, then one would land in ethical pluralism and it would be no longer possible to lay down universal standards of behavior. That seemed intolerable at the time. If one took the second alternative, only the reason or some nonrational moral sense was at hand as the authority in matters of ethics. Since the reason to Rousseau was scientific reasoning, which was the same as Kant's pure reason, it had to be rejected. Hence there was only a nonrational faculty to turn to.

3. *The Critique of Practical Reason*

Kant's interest in ethics was not a development of his old age. As early as the 1760's he had projected a series of lectures on ethical problems.[5] But his mature views emerged out of certain problems involved in his theory of knowledge. The first *Critique* had shown that scientific knowledge was limited to the world of appearances and that the pure reason could never penetrate the perceptual screen to the realities which it concealed. These realities, called by Kant the things-in-themselves, counted values among their

[5] The best account in English which I have found of the development of Kant's ethical ideas is in Lewis White Beck's introduction to his translation of the *Critique of Practical Reason* (Chicago: University of Chicago Press, 1950). This volume also contains translations of shorter Kantian treatises on the subject. References in my text are to this translation.

number, and the moral and aesthetic values were after all the very things that men most wanted and needed to know. The world of descriptive science, however imposing a picture it might give mankind of the beauty and order of the universe, could not suffice to fill our intellectual needs. For besides the problem of the limits of knowledge there arose two other questions: the question of moral obligation (what ought I to do?) and the question of what one could hope for. The former in itself had to be supplemented by the latter, for even if a man knows what he ought to do, he also wants to know what possibility there is of doing it.

The very fact that Kant posed these questions at the end of his major epistemological treatise is evidence that, to his way of thinking, ethics was the completion of epistemology. Man to him was not simply a cognitive animal; he was essentially a moral animal. He might have followed the lead of naturalistic philosophers and have tried to discover values in man's animal life. As animals men desire certain things—food and sexual satisfaction above all others, pleasures of various sorts, domination over their fellows, social prestige, self-esteem. Some ethicists had taken such goals and erected them into the final purposes of humanity. But the fact that men all and always sought, for instance, pleasure, did not seem to Kant any proof that they ought to do so. No society has ever permitted its members to do anything they might wish to do, and even our basic biological drives are always controlled somehow or other by the laws and customs of the tribes in which we live. The split between fact and value, between what is and what ought to be, seemed to Kant a real split and there was, as far as he could see, no passage of a logical sort from one to the other. One might with Alexander Pope declare that whatever is, is right, or with Leibniz that whatever is, is the best of all possible beings, or with Helvétius that we must follow Nature, or for that matter decide that no solution is possible and that man is an animal who desires the impossible. But the essential moral nature of man in Kant's eyes could not be explained away. It was the fundamental fact which stood as a challenge to the theorist and it was up to the theorist to justify that fact. That man has a sense of obligation can scarcely be denied; one man may feel obligations which another does not feel; the target of obligation may vary from complete selfishness to complete self-abnegation. The variety of targets itself might be taken as evidence of the unnaturalness of man, for most beasts, at least those of which we know anything, seem to behave with a uniformity of conduct like that of inanimate objects. One can make generalizations about them which seem sound, whereas any generalization about human goals seems unsound when it goes beyond saying that men do seek them. Kant's right to posit moral obligation as a fact, then, would seem to be justified, and the problem of the conditions under which it is reasonable is a real problem.

Moreover, the fact that human knowledge is limited and that we have a sense of its limits proves to a man of Kant's temperament that something must lie beyond the limits. The idea of limitation "implies" a point at which something stops, and that point can be defined only by other points or regions which lie outside the limits. This is to be sure a metaphor, but it is the best one can do to clarify the notion. If we cannot know everything, then it would seem reasonable to believe that there are things which we cannot know, and whatever such things may be, they must be of a nature utterly unlike that of the things which we can know. So much is tautological. But one might at this point take either of two positions: (1) that we must resign ourselves to ignorance and decide that, in the case before us, the realm of human values cannot be explored by human means; or (2) we might examine the conditions which would make our sense of moral obligation reasonable. To take a trivial example of the problem, we have not as yet succeeded in traveling through interplanetary space. But we can calculate what must be done to achieve such travel. We can state with some precision the problems which interplanetary travel must face before we even begin to construct the machines in which the voyage will be made. If we accept the first alternative, we may also conclude that man's fate is hopeless. We may be able to discover the conditions which alone make morality possible, and they may be such that they are unrealizable. In that case the search for moral values becomes futile. Man could become envisioned as trudging through infinite space and hoping to reach its limits. But this was far from being the attitude of Immanuel Kant.

The most compendious formula for his position is that we have a right to believe in those principles which are necessary for the moral life. Those principles are the existence of God, of a free will, and of an immortal soul. None of them can be proved by the pure reason; they are postulates of the practical reason. God in this context is needed not simply as the creator of the world but also as the basis of values, the standard of the highest good. If judgments of good and evil are possible and they exist in varying degrees, then there must be a terminus, the highest good, beyond which one cannot proceed. To say that X is better than Y demands a standard of comparison, and unless one is willing to proceed *ad infinitum,* one must posit an ultimate goodness; and that is precisely what one means by "God" when one is speaking of God's moral position.[6] God's existence could not be proved by scientific inference; it is needed if we are to do our duty. Again, one is faced with the possibility that we cannot do our duty, and again Kant refuses to consider that possibility.

Assuming then the legitimacy of moral judgments, the existence of a supreme standard of value is based upon the postulate that there are universal—and eternal—standards of goodness applicable to all men in precisely the same sense that standards of truth are so applicable. If it be true that the earth is round, then all rational men must accept that truth; it cannot vary from tribe to tribe and from individual to individual. Similarly if it be true that it is wrong to lie, then it is wrong everywhere and on all occasions, for all purposes, and to all people. The names of the virtues and vices must be univalent and the only way to make a name univalent is for it to denote a class of beings whose nature does not change. In the case of ethics, such beings are motives and acts. The ethicist's problem is to so define good and evil that they will be homogeneous not only through space but also throughout time. But this clearly depends upon there being a realm of values that is itself universal and eternal. And since both good and evil vary in degree, there must be in that realm of values a final standard at least of the good, for evil may be considered simply as distance from the final standard. I could neither judge conduct nor aspire to good conduct unless there were some possibility of realizing such purposes. I might always fail of achieving my goal, but also I might fail to reach the truth though I was sure of what the standard of truth really was. A succession of scientific failures would not be proof that there were no conditions under which a statement might be true. Similarly our pathetic attempts to be perfectly virtuous may end in failure; but that does not demonstrate the nonexistence of moral perfection. The earth was round even before Magellan circumnavigated it, but he could not circumnavigate it unless it were round.

Beneath all such arguments lies the assumption of Kant's that if one must do something, one can do it. The "must" in this sentence is obviously a moral "must." But once more he was incapable of seeing man as striving for absurd ends, ends which by their very nature could not be reached. The impossibility of reaching an end does not always lie in our incapacities; it may lie in the supposed nature of what we desire. Squaring the circle has been demonstrated to be an impossibility; but the impossibility is not weakness of human intellect, any more than finding a whole number which is the square root of 2 depends on intellectual insight: there is no such number. Men actually do dream of impossibles; that is one of their distinguishing characteristics. And it may very well be that moral perfection is one of them. The argument that one can do what one must do is sound enough when it is an affair of legislation; that is, when one is commanded to do what one cannot do. But, as Kant himself saw, morality is not an affair of command; it is an affair of a man's will and he sees no "sense" in assuming, even for the sake of argument, that we will the theoretically impossible. He is willing to admit that none of this can be inferred from the nature of the world of fact, but he is unwilling to admit that the world of fact alone exists. The moral sense of whose veracity he had been convinced not only by Rousseau but also by the school of Shaftesbury, Hutcheson in particular, demands satisfaction. To ask it to prove its conclusions as the pure reason proves its conclusions is nonsensical. One might as well try to prove why certain light rays stimulate *red* and others *blue.*

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[6] Cf. St. Thomas Aquinas' fourth proof of God's existence. See also Kant's *What is Orientation in Thinking?*, in Beck, p. 298, and *Critique of Practical Reason*, p. 233, n.

If we can do what we must do, then we are free. It would be pointless to try to do our duty if we were not free to do so. A man acting under compulsion, even when he is compelled to do the right, is not a moral subject. He is just as irresponsible as a man compelled to do evil. Compulsory acts are irrelevant to ethics. Compulsion is a feature of the world of science, of fact, of the pure reason. A moral person is one who makes his own decisions, not one who acts either from command or habit. Hence freedom is a prerequisite of the moral life, and since we are able to be moral, we must also be free. But freedom for Kant is self-dependence, rather than dependence on others. One does not make one's moral decisions independently of all considerations, as if they were matters of chance. One is guided by the moral law and the sense of duty, but one's decision to do one's duty is not imposed from without. Kant realized that this concept of freedom was inexplicable on scientific grounds,[7] for to his way of thinking science was impossible without strict causal determinism. It is true that even if the human being is as he is because of previous events, his ancestors and his childhood environment, for instance, he still contributes a good bit to the events in which he participates. But Kant first did not believe, for reasons given in the first *Critique,* that moral values belonged to the world of the pure reason; he did believe that causality was applicable only to that world. The moral will had to act freely for the simple reason that there were only two possibilities, a determined will and a free will. If determinism is found in—or better, projected into—the phenomenal world alone, and if the will has nothing to do with that world, it must perforce be free. The inexplicability of its decisions arises because of the simple fact that explanation is always causal. Kant once more could have chosen the alternative theory that the will is in the phenomenal world and hence is not free and that furthermore morality is an illusion. But, as is obvious by now, he did not.

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[7] *Foundations of the Metaphysics of Morals,* p. 113.

The necessity of immortality is perhaps a bit less clear. Kant identifies morality with holiness and his conception of holiness is conformity to an eternal, not a temporal, law. To attain such conformity is impossible in the world of history with all its accidents and obstacles to moral purity. We face the same situation here as with other examples of universal and necessary principles; they all fall short of perfection. The gap between essence and existence, the impossibility of logically inferring existence out of essence, is analogous to the gap between temporal decisions and the obedience to the eternal laws of duty. Man—that is not Kant's phraseology but mine—can be seen from two points of view: the historical and the eternal. From the former he becomes an incident in time, with all his vagaries, his indecision, his diversity from his fellows, his deviations from the norm. From the latter he becomes one member of a homogeneous class about which absolutely true statements can be made. Eternal man can do his duty, for his duty is simply a paraphrase of his nature: it is what he would do if he were not caught in the web of time. His historical nature must be transcended if he is to become moral in the purest sense of that word, and one could think of his moral problem as that of transcending temporal accidents and historical involvements. It is the problem of recapturing his true nature, of being a man and not an incident in a chain of fortuitous circumstances. But to solve this problem is clearly impossible so long as man remains on the temporal scene. It is for that reason that he must posit his immortality. Unfortunately, Kant seems to confuse two sorts of immortality. Eternity in the sense of timelessness is the characteristic of logical beings, Platonic essences. Logical eternity has no duration whatsoever. But immortality as it is usually conceived, and as it is conceived by the traditional Christian eschatologists, is duration without end. To become the eternal man in the former sense is not necessarily to become the immortal man in the latter sense. It is rather to achieve Spinoza's type of immortality, a condition in which time is irrelevant, so that one might be said to be immortal—or eternal—for a few moments—though the words are inconsistent. One can easily see why an eternal will might be necessitated by Kant's ethical theory, but why need one be immortal? In fact, moral decisions lose their meaning in a life beyond the grave. The moral perfectibility which requires, as he says (*op. cit.*, 226), "endless progress from lower to higher stages," can only be achieved in a realm of temporal succession. The world of eternity is a *totum simul* by definition, and once one has entered that realm there could be neither progress nor degradation.

That Kant thought of the moral will as essentially eternal rather than historical is fortified by his conception of the categorical imperative. The categorical imperative, which was phrased in a variety of ways, always is an eternal law based upon man's essential nature. It is thus in ethics the analogue of the transcendental unity of apperception in his epistemology.[8] The latter bound together the various experiences of individuals into one universal experience; the former is the condition of a uniform field of values. Whether Kant urges men to consider all people as ends, not means; whether he exhorts them to "act only according to that maxim by which you can at the same time will that it should become a universal law"; [9] whether he thinks of the moral will as a self-legislator; he is always deducing the imperative from the nature of mankind as an eternal being and thus making it binding not merely on all men in extension but as the differentia of man as man. In an eternal world there are no means; there are only ends. The ends may be logically interrelated, but they can have no other relations which might involve temporal succession. In the second place, no law which is less than universal could possibly be found in such a realm; for in it there is no contingency nor particularity. In the third place, self-legislation is inevitable since no single being there can act upon any other single being and all acts follow from the inherent and essential nature of its inhabitants. Once again the analogy must be made to a logical system such as that of geometry. The theorems follow not by causal interaction but by logical necessity. If the sum of the angles of a triangle is equal to 180 degrees, that is because of the nature of triangles; once these beings are defined, all else follows. Consequently the moral problem becomes that of a temporal being's trying to live as if eternal. To emerge from the realm of appearance into the realm of reality is both virtue and happiness, and if they are to be attained it is clear that one must live in accordance with laws which transcend the laws of phenomena.

Out of this theory of ethics flowed an anti-intellectualistic tradition which had many branches in the nineteenth and twentieth centuries. If only the will is good, and if reason is confined to the phenomenal world, then the needs of the will determine what is true—of reality as distinguished from appearance—and also what is good. The idea that the requirements of the ethical life could become evidence for what look like propositions of fact, gives as the test of some truths, and these the most important, our needs and not observation, factual evidence, logical consistency, experimentation, the implications of the indubitable, or any of the other traditional sources of verification. When a man like Pascal in the previous century had argued that the truths of religion could not be discovered rationally but must be known by the heart and went on to develop his theory of the wager, he was not far from taking the position which was to be Kant's. The wager was forced upon us since we could not have rational evidence of what we were trying to prove. Its operations were those of the practical reason, or the will. We are, said Pascal, committed to taking sides and there are only two sides to choose between. We are urged to choose the side which may lead away from misery into salvation. We are not forced to take this side any more than in Kant we are forced to follow the categorical imperative. But both Pascal and Kant know precisely what happiness consists of before they begin their argument, and both, though the matter is not crucial, know that it will never be attained in our temporal life. Since paradoxically enough the reason cannot enter into the eternal life nor for that matter into the inner life of the human being, some other faculty must be called upon to inform us of its topology.

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[8] This was brought to my attention by Professor J. Loewenberg.

[9] *Metaphysics of Morals*, p. 80.

Anti-intellectualisms all agree, as we have said, in maintaining that the intellect is guided by aims other than what is ordinarily called truth. They maintain that it is restricted in range (which would be the attitude of such men as Pascal, Kant, and, later, Henri Bergson and Croce) or subservient always, whatever its field, to some other faculty or group of faculties. It will be found to have several forms, which are not always mutually exclusive, as we actually come across them in history. They may be briefly catalogued as follows.

> (A) The intellect—science—by its very nature is incapable of penetrating into certain regions of human interest: life, morality, the arts. Its subject-matter is held to be the world of sensory observation, matter, space, the analyzable, the atomic. Its method is said to be unfit for the vital, the temporal, the synthetic, the organic, the unanalyzable.
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> (B) All reasoning depends on premises which themselves cannot be proved.

(1) The premises are chosen by faith, *the heart,* feeling, sensory observation, revelation, tradition, common sense. But sensory observation varies with the observer according to the acuity of his sensory perceptions, his age, state of health, anticipations, and the like. Faith, the heart, feeling, tradition, all vary from group to group and even common sense turns out to be historically determined. As for Revelation, it has been given only to one group of people, namely the People of the Book, and there seems to be no reason which would compel one born out of this People to accept it as ultimately true.

(2) Sometimes the premises are chosen to fit the needs of theory. As in a formal system of thought, the only test for truth is logical consistency; we deliberately choose premises which will give us the consistency we need. But there is a large number of possible premises which will imply any given conclusion, and it is a logical fallacy to move from conclusion to premise except in the case of tautologies.

(3) Since the development of the non-Euclidean geometries, the various systems themselves have been said to be equally true and the choice of a system has been said to be made on the grounds of its utility or the satisfaction of some nonintellectual interest. Thus the architect uses Euclidean geometry, the astrophysicist, Riemannian. The only truth which we can attain is consistency, and the intellect is said to be a discoverer of consistency not of truth to fact.

(4) It is sometimes maintained that the premises are chosen unconsciously as when one, without realizing what one is doing, sees that as self-evident which supports one's ethical, religious, aesthetic, or political views. These views are held because of previous educational influences or simply because they meet one's practical requirements.

(5) Sometimes one is said to make a conscious and legitimate choice of premises which will give one the practical results one needs. This choice is made in despair of solving the problem otherwise. Here we make our choices by an act of will, knowing that if they give us untrue results we shall have to reject them.

(C) One form of anti-intellectualism emphasizes the nonlogical factors in all thinking.

(1) Sometimes what might be called the human equation is accentuated, as in Bacon's Idols of the Tribe. But Bacon believed that we could free ourselves of the hold which these Idols have upon us whereas the anti-intellectualist denies this. He points to the projection into external reality of our own traits, as when we argue teleologically, interpret causality as artistry and production, read human values into the nonhuman world. He will admit that as history progresses we overcome these handicaps

but unfortunately we introduce others as great, if not greater.

(2) Moreover, the very instruments which we use to interpret and to observe the world contribute something to our interpretations and observations. Thus there is a congruence between the subject-predicate proposition and the metaphysics of subject and accident; between the use of common nouns and adjectives and the belief in universals, between words for things and the reification of processes. Again our visual instruments atomize that which should not be atomized, and our science is based upon the world as it is seen by the human eye or some other sensory instrument. Since we are forced to use instruments, whether those which are parts of our body or those which we manufacture to improve our sensory observations, we can never get at reality as it is, and our ideas, however abstracted they may be, are always determined by the tools which we use to perceive and measure them. Furthermore, we erect as standard objects those which are perceived by one or a group of such tools, forgetting that the ideas based on these objects can never free themselves from what might be called the organo-centric predicament.

(3) We also inevitably use certain conventions and fictions in constructing our scientific theories. Such conventions are expressed in certain traditional formulas such as the denial of action at a distance, the simplicity of nature, the principle of parsimony, and the uniformity of nature. We can always overcome such conventions when we know that they are conventions, but we are doomed to formulate new ones to take their place.

(4) Finally we make use of basic metaphors [10] such as *ex nihilo nihil,* where the *ex* is treated as if it really and literally meant "out of." The envisioning of living beings, the life cycle, for instance, as a series of mechanically related stages would be another; the envisioning of things as cross-sections of events would be the reverse of this.

When one examines each of these forms in detail, one discovers such a possible proliferation of anti-intellectualisms that a large treatise would be required to do them justice. Such an examination would also show that several of them go back to a period well before Kant. Thus the notion of the unreliability of sensory observation as a source of rational premises can be traced easily back to the Ten Tropes of Aenesidemus as that of the limited range of rational inquiry can be traced back to the Christian doctrine of the Twofold Truth. But the most influential source of nineteenth-century anti-intellectualism was undoubtedly Kant's first two *Critiques*. For his arguments which limited the pure reason to the realm of appearance

[10] Professor S. C. Pepper calls these root-metaphors and reduces them to four. In one of my juvenilia, *Our New Ways of Thinking,* 1930, I suggested others. But the first explorer of this problem was Vaihinger in his *Die Philosophie des Als-Ob.*

seemed well nigh irrefutable to the next three generations, and the legitimacy of positing as true those ideas which were necessary for the moral life opened the way for other nonlogical bases of truth. In fact, Vaihinger, who wrote the most detailed analysis of the use of fictions and conventions in thought, was a fervent commentator on Kant, and Schopenhauer, whose anti-intellectualism was central to his whole philosophy, believed that he was preaching the true Kant in opposition to the theories of the false Kantians. Earlier forms of anti-intellectualism had generally been limited to religious knowledge or had been used in defense of scepticism. The newer anti-intellectualisms were more reaching in their scope and, as in pragmatism, resulted in a new theory of truth itself.

CHAPTER 16

Voluntarism in the Nineteenth Century

KANT'S third *Critique* took as its problem the analysis of what he believed to be the third principal faculty of man, that of appraisal or judgment. The pure reason, which could be identified with scientific investigation, the practical reason which determined our moral duty, and the judgment, which discovered the worth of things, form a triad which as far as he could see include all the powers which are peculiar to the human mind. Reason, the will, and the senses had long been believed to be the three faculties which were united in the soul; Kant gave a new interpretation to them all by limiting the reason to the pure reason which could never penetrate beyond the veil of sensation, by assigning to the will the power of establishing those principles as true which were required for its moral tasks, by substituting for the senses the judicial power of giving aesthetic values to nature and art. But in spite of the neatness of his classifications, he not only retained but accentuated certain paradoxes. Thus the pure reason could discover its own limitations; the perceptual world was caused by an unknowable transperceptual world, even though causation was but a category used by the understanding to organize the sequence of phenomenal events; the experiences of an individual because of the transcendental unity of apperception are ordered as if they were the experiences of a single universal mind; the peculiar moral problems of the individual are solved by the categorical imperative which by its nature is beyond time and place;[1] and though the mind which is confronted by a work of art judges its beauty by the application of universal principles, the appraisal is made intuitively.

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[1] This in some ways is the most puzzling paradox of all, for the peculiar moral problem may be, and often is, determined not by its eternal traits but by its historical. How can one decide that one is or is not to do this specific act—on this occasion, toward this person, for this purpose, in this manner—by its general or universal traits which for the very reason that they are general are irrelevant to those which are peculiar? Men do not live under laboratory conditions or *more geometrico* and hence their problems are seldom cases of anything.

1. *The Critique of Judgment*

The Critique of Judgment, to give it its usual English title, has often and correctly been thought of as filling the gap created by its two predecessors. The gap was not merely that of beauty, whereas both truth and goodness had already been given their niches, but that between the scientific and the moral order. In both scientific laws and moral judgments there was a fusion of the universal and particular, in that in the former case a universal assertion was found to hold true of a particular event and in the latter particular acts were to be corrected by universal commandments. But in the case of a picture or a poem or any other object, whether natural or artificial, which we feel to be beautiful, we recognize its stubborn individuality and we are impelled to do nothing whatsoever but look at it. Since it is, let us say, a material object, it belongs to the phenomenal world; and since it belongs to that world we can describe it as we would any other item in the vast inventory of that world. But the feeling of beauty is clearly not scientific classification. Again, a picture or a poem or a landscape may "say" something and thus gain moral relevance, as when critics point out the great moral lesson of Michelangelo's *Last Judgment* or explicate a sermon in stones. But to translate a picture into an essay is not to be touched by its beauty and, in fact, it has often been believed that the more closely a work of art approaches an imperative the more it loses its aesthetic character. Kant is no more trying to write history in the *Critique of Judgment* than he is in the *Critique of Practical Reason.* He assumes that aesthetic judgments can be true and false; that they arise out of a kind of feeling—or sense of beauty; that this feeling is not an impulse to take practical action; and he then attempts to discover how all this is logically possible. He knows that some works of art have had a moral purpose, but he insists that this purpose is irrelevant to their aesthetic value. The object, then, when viewed aesthetically is a more complete analogue to the universe itself than either a scientific object or a moral act. Keats's famous verse on the silent form which teases us out of thoughts as does eternity would be a perfect brief summation of the whole idea.

In Kant's more prosaic language the faculty of appraisal always judges the fitness of means to end. But, however prosaic the language, the problem which confronts the man who contemplates a work of art is charged with paradox. For no one can announce by inspection the end for which a work of art has been produced, to say nothing of that for which a beautiful natural object has been created. The teleology inherent in the formula is not that of the Bridgewater Treatises, for Kant insists that beauty is useless. Here the analogy with the macrocosm gains significance. Every beautiful object exists for its own sake and need be related to nothing beyond itself. The fitness which is involved is the congruence between the work of art and our own minds. The first *Critique* had demonstrated this congruence as far as science is concerned; the second as far as ethics enters the picture. But the third presents the human mind face to face with that which is its object, not reasoning about it, not attempting to utilize it, but simply and clearly looking at it. But what it sees is the congruence in question conveyed through the physical object but not identical with it. The aesthetic experience for him is immediate apprehension usually employed in the perception of sensory qualities, of universal principles usually discovered through rational analysis. That the work of art embodied universal traits had been said as early as the third century by Plotinus, and the whole Neo-Platonic school had repeated that beauty was a sensuous manifestation of the ideal. But the ideal in that case was simply the generic characters of the class of beings to which the object naturally belonged. Thus a painting of apples revealed sensuously the essence of apple-hood and a painting of Venus the essence of female beauty. By what magical power this was possible had never been made clear, and the principle remained one of those rhetorical flourishes highly charged with emotion which seemed to satisfy men who would like works of art to have supernatural traits. But what was universal in Kant's theory was not the Platonic essence at all; it was the kind of order which the universe is known to have through science. One might say that when Newton saw the apple fall, he saw not merely that specific event but the law of gravitation in action. If the moon falls on the earth and the planets on the sun as the apple falls to the ground, then the fall of the apple becomes more than a single historical event. It becomes evidence for and an example of a universal event. But the point of Kant's argument is that we are able to apprehend this universality by feeling, without reflective thought.

There are several reasons to support this theory. First, all beauty was supposed to be sensory. The very name *aesthetics* was invented by Baumgarten because he believed that beauty lay in the sensory field. It was of course not only a badly chosen name, since aside from a few ordinary sensory experiences, like the color of the sky, the sound of a bird, or the taste of something agreeable, no aesthetic experience ever was confined to sensory apprehensions. It is perhaps through sensory apprehensions that we grasp the meaning of a beautiful poem—or an ugly one for that matter—but the meaning of the words and phrases is not bounded by their sound. But whether badly chosen or not, the tradition that beauty was an affair of the senses was too strongly founded to be questioned. Second, it was always assumed, as it is still today, that differences in taste were unimportant and that the "laws" of beauty were binding on all men alike. Hence, regardless of whether beauty is apprehended by our sense organs or not, it must be something which transcends the limits of any individual's experience. Third, it must be subject to rational discourse while not attainable by the reason. That is, we must be able to argue about the relative beauty of two objects while admitting that feeling the beauty is not identical with knowing that an object is beautiful. This may well have arisen from the one experience of beauty which all men must have had at some time or other in their lives, that is, in sexual attraction. No one ever fell in love—and I am speaking of straightforward physical love—with a woman because he first measured her and found that she had the same measurements as the Venus de Milo. It is true that most books in aesthetics seem to have been written by eunuchs, but that need not concern us here. My one point is that there is at least one occasion on which a man feels the attraction of something beautiful without knowing (or caring) why it is beautiful. Finally, we repeat that the aesthetic object is always an individual object, *this* poem, *that* picture, *this* person, not *a* poem, *a* picture, *a* person. The beautiful object thus combines, or seems to combine, the conflicting properties of the universal and the individual. To make it so abstract as to become really universal is to rob it of its aesthetic properties. To make it completely sensory is to make it unintelligible.

The paradoxical nature of the beautiful object was to become a paradigm for the Post-Kantian philosophers. But even in nonphilosophical German literature paradox was to become a stock-in-trade of the Romanticists. Friedrich Schlegel's famous *Lucinde* is a case in point. There we find the hero writing to his beloved, "Through all stages of humanity do you accompany me from the most exuberant sensuality to the most spiritual spirituality and only in you did I see true pride and true feminine humility." [2] The very fact that two lovers are bound together in unity, "not merely for what we call this or that world, but for the one true, indivisible, nameless, infinite world, for our whole eternal being and life" (*ed. cit.*, 22), is supposed to add value to a love which would have been inferior if the two had retained their duality. Yet without the duality there could be no union and without union no fulfillment of love. But the ultimate paradox of the story occurs in the section called *Longing and Repose* (*ibid.*, 286) where Lucinde asks her lover Julius why she always feels the most serene repose in deep longing. "Only in longing," answered Julius, "do we find repose. Yes, repose comes only when our spirit is disturbed by nothing in its longing and search for that wherein it can find nothing higher than longing itself." Longing which might be satisfied would be longing defeated. Man's spirit must strive after goals which it can never hope to reach. So Lessing in his famous epigram on the search for truth, so Goethe in his repeated theme of the eternal feminine. Don Juan who passes from woman to woman becomes the hero of the school, for his very infidelity is really a search for the ever retreating ideal. Don Quixote by the very absurdity of his quest is the symbol not merely of the pathos of human ambition but of the one reality which man can grasp. The blue flower of Novalis, never to be found, but the more precious for that, might be set up as the emblem of the same group. And even Schubert wrote two songs entitled *Sehnsucht*.

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[2] I quote from the edition of 1799, p. 21.

2. Fichte

To see man caught in a current of restless striving for ideals which he can never attain might have become the center of a pessimism as deep as that of Schopenhauer. But the first post-Kantians did not go that far. In Fichte (1762–1814), for instance, what was longing in *Lucinde* turns into a cosmic process. The things-in-themselves, which were unknowable in Kant, were tossed out of the philosophic baggage as nonsense. If they are really unknowable, we may just as well forget all about them for whatever we say of them is bound to be false. Their mere existence cannot be asserted, for to assert that something exists is to know something about it. The one thing we can know is our spiritual life and that life is to be discovered not in the calm of contemplation but in striving. The reason which in Kant had its theoretical possibilities was turned into the will—in short into Kant's practical reason—and whereas in Kant its demands could establish certain moral postulates, in Fichte it could create the world itself. The will must have something to achieve, something to act upon, something to overcome. But since there is no evidence of any existing thing to be derived from volition itself, the existence of a world must be found in the nature of volition. Fichte's will was not mere longing. It was striving for ideals. But

Fichte, dramatizing the national situation of his country, saw that the achievement of the ideal could only come about through the conquest of the real. One cannot fight the good fight without an adversary, but where was the adversary to be found? Only in a free act of the will to create it.

In the technical jargon of philosophy the Ego posits the Non-Ego to become more of an Ego. But in the language of common sense we set up our own adversary to overcome it. It never will be overcome, and if it were to be we should be aimless souls with nothing to do.

Now this boils down to the fact that philosophy must reorient itself away from science and toward morality. The hard objects of the material world must be given ethical significance, must not be interpreted in the quantitative terms of physics but in terms of their relation to our moral life. The only ethical meaning which we can give to them is that of opposing the human will. That is why they exist. That alone makes their existence intelligible. That does not entail the belief that science has no value; but it has limited value since it can never reach reality itself. Once it is proved that reality has no moral color, nor intellectual, then all things must be reinterpreted in relation to the good. The Ego's positing of the Non-Ego is such an ethical reinterpretation. When the theoretical "plain man" asks what is the meaning of things, he is asking a question similar to that of Fichte. The answer could have been aesthetic as well as ethical. Man's sense of beauty could have been set down as his fundamental trait and all reality interpreted as elements in a cosmic work of art in which beauty would have taken the place of truth. But Fichte was a hard working man himself, a great patriot who will always be remembered in Germany for his stirring speeches to what he called—somewhat optimistically—the German Nation, and man's striving after perfection was to his way of thinking the secret of all life. He could also have assumed that the moral will, through no desire of its own, was set down by God or Chance in a hostile universe which he was determined to overcome. But his reading of Kant convinced him that the world of fact could never be the world of value except insofar as human beings were involved in it. What reality it has is discovered in its opposition to us, not in its simple resistance to pressure, as in Destutt de Tracy, but in the possibility of its frustrating our desires. What gives Fichte's philosophy a novel twist is his belief that we need and want such a world to oppose us.

But in his own exposition the matter was set forth in purely dialectical fashion. Looking for a method which would give him absolute certainty, he was forced to avoid any empirical judgments which might be true but would be only relatively true. Just as Descartes had concluded that the one incontrovertible truth was self-identity, so Fichte concluded that the one incontrovertible truth was the Law of Identity, *A is A*.[3] The symbol *A* in this expression may stand for either a thing, or a concept, or a sentence; its reference is immaterial to Fichte's argument. It may be interpreted as meaning that a term must not change its significance in a chain of reasoning, that a given thing does not change its "nature," or that tautologies are always true—or consistent. But what is important for Fichte is that the Law of Identity is asserted by someone; it is a judgment and the only judge is the Ego, the judging mind. Identity then must be found primitively in the self-identity of the Ego, for there is nothing else, of which one has any certainty, to find it in. Further than all this there is a necessary and not merely empirical identity between the two *A*'s. We can give no reason beyond the judgment itself for the necessary identity and yet we believe that it is self-evidently so. This to Fichte's mind is proof that the necessity of the identity is to be found in the being who asserts it, and thus the first certain principle of his metaphysics is the Ego's assertion of its own being. The problem now is to get beyond one's self-awareness. Are we self-enclosed like Leibniz' monads, windowless, incapable of knowing anything external to us, incapable of knowing that there is anything external to us? The belief which we have in the existence of other minds, as well as in a world external to our consciousness, the belief that there is a legitimate distinction to be made between dreams and waking life, hallucinations and veridical perceptions—are such beliefs illusory? Are the distinctions preserved in common language between what we think and what actually is unnecessary distinctions? One might imagine that if we can be certain only of our own being, we should stop at this point unless we are to supplement certainty with probability.

But like most philosophers Fichte wants to substantiate the beliefs of common sense insofar as those beliefs will give him the kind of system which he wants. His wants, which clearly existed before he began to philosophize, were in part determined by the philosophical conclusions of his predecessors, especially Kant, and in part by the kinds of questions which he was putting to philosophy as a discipline. When, for instance, a philosopher wants to prove the existence of God, he usually stops when he has done so. When he wants to give some ground for believing in universal values or the immortality of the soul, for the infinite divisibility of space or the nonexistence of mind as distinguished from matter, he is usually satisfied when he has accomplished his purpose. The legitimacy of a problem seldom seems to be itself a problem. Few philosophers have ever raised the question of the orientation of philosophic meditations. This is to be sure a psychological, not a logical, problem and that may be the reason why it has aroused so little interest. In any event it remains one of the darkest corners of the history of philosophy, and all one can say about it is that individual philosophers put different questions to both the universe and the reason and are satisfied with different answers to them. Why Fichte wanted to escape from the cramping circle of solipsism may have been merely because he accepted the existence of an external world on the grounds of tradition or common sense and then tried to justify his attitude.

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[3] *Ueber den Begriff der Wissenschaftslehre,* ed. J. H. Fichte, 1845, Vol. I, p. 69.

There was a simple way out of the difficulty furnished by the old principle: All determination is negation. That is, if the word *I* is to have meaning, it must select out of all possible beings one or one set of beings. Such selection is equivalent to negating all the others, the *not–I's.* To assert the existence of the Ego is then equivalent to asserting that it is not the non-Ego. And one sees that one has already made an implicit judgment to the effect that there is something which is not the Ego and with which it may be contrasted. Fichte does not overtly argue from this principle but seems to assume that we have an idea of negation which permits us to assert the identity of B and not–A. No one indeed would deny this, but he might deny that if in fact we are aware only of our own existence, we could appeal to any logical formulas to express anything other than our own existence. The minute we also accept the traditional rules of logic, at a minimum the three Laws of Thought, we have procedural rules for transforming the initial assertion into a variety of other assertions.[4] But Fichte limits himself to the Law of Contradiction and points out that the very assertion of the existence of the I implies the existence of the non–I, thus giving it the same certainty as that of the initial proposition. He does not, it should be emphasized, infer existence from essence; on the contrary the existence of the I is found in the necessity of there being a subject to assert or judge. And so far all the distinctions are within the consciousness of the Ego. Within that consciousness there is an obvious conflict, the assertions of two contradictory beings, the Ego and the not–Ego, neither of which means anything without the other. Strictly speaking, it is not so much contradiction which is involved here as difference. But in view of Fichte's apparent acceptance of the Laws of Thought as inherent to the operations of the judging subject, the only way in which the difference can be expressed is through the Law of Contradiction. And that to his way of thinking gives him the right to lay down a Category of Negation as implicit within the Category of Assertion. Each category is essential if definite meaning is given to what is known. The Ego becomes a universal term meaning nothing in particular until it is limited by something other than itself, the Non-Ego, and the Non-Ego would have no meaning if it were not limited by its contradictory, the Ego. That all this is rooted in the nature of thought itself does not make it subjective in a bad sense, since we have no certainty of anything other than thinking. To call it "merely" subjective would mean that we have an idea of something nonsubjective, and the fact of the matter is that we have no such idea as yet. We have simply certainty of the interplay between two contrary ideas which are reciprocally interdependent.

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[4] For instance, *A is A* can become *A is not not–A, B must be either A or not–A,* and the like.

But there is one feature of the *I* which distinguishes it concretely from the *not–I*. That is its activity in assertion. The difference between the Ego and its opposite does not swim up to the surface of consciousness of its own accord; judgment is essential to the recognition of an object about which the judgment is made and judgment is action. But if the judging subject is active, the object which is judged must be called passive. And this gives us a picture of the mind which is the very opposite of that drawn by the empirical tradition. According to that tradition, the subject received influences from a nonsubjective world—impressions, primary ideas, sensible species, the eidola of Democritus. The human being has a mind which is, to use Locke's phrase, white paper at birth, and whatever contents there may be in the mind are put into it from external sources. In Fichte it is the mind itself which is active and knowledge has to be interpreted as something which the subject does to the object. The power which the mind exercises over the object is called by Fichte in the *Grundlage* (p. 160) Imagination (*Einbildungskraft*). This is neither idle daydreaming nor uncontrolled fantasy. It is the activity of a mind constructing and organizing things to its own ends. But though its ends are its own, they are determined by its essential nature and that nature, as we have said above, is that of the Practical Reason. In other words, the world of knowledge cannot be produced by a nonmental agent, for there is none. It cannot spontaneously occur, for such words would explain nothing. It is not discovered by simple inspection, for we do not all seem to have the same scientific knowledge either at birth or at maturity. Organization must be made for a purpose which would be relevant to the needs of the Practical Reason and those needs are moral. The world then must be interpreted in ethical terms, and the whole of Fichte's ethics is an attempt to show that every feature of the universe has relevance to our moral needs. That these needs will never be completely met in this world is of no importance. For, as we have said, the Romantic thinkers thought none the less of aspirations because they could never reach a conclusion.

Perhaps the most famous of Fichte's systematic statements of his whole theory occurs in the *Vocation of Man* (1799).[5] This work is divided into three parts, significantly called *Doubt, Knowledge,* and *Faith.* It is worth observing that the doubts of the hero rest, as those of the Savoyard Vicar did, on natural science and its supposed implications. Since the description of science became typical of thoughts on that subject up to our own time, I outline them briefly here.

(1) Science gives us a world in which everything is determined; "it is what it is and nothing else" (*ed. cit.,* 241). All existence is determined by inexorable law and there is no possibility of any break in the causal series. Causal necessity explains all that happens and consequently whatever is a part of the natural order is as it is because of antecedent events.

(2) Though causal efficacy is an expression of a power inherent in whatever is causal, yet the expression of that power is itself limited and determined. Each cause does but one kind of thing: each seed develops under the proper conditions into but one kind of plant, each chemical substance unites with others according to specific laws. Because of this generalizations can be made and natural science forms a deductive system.

(3) But the whole cosmos is interconnected so that whatever happens in any part of it has its effect upon the whole and is caused by the organic structure of the whole. "In every moment of her duration Nature is one connected whole; in every moment each individual part must be what it is, because all the others are what they are; and you could not remove a single grain of sand from its place, without thereby, although perhaps imperceptibly to you, changing something throughout all parts of the immeasurable whole" (*ibid.,* 246). Fichte does not explain how any change could

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[5] I use the translation of William Smith in his *Johann Gottlieb Fichte's Popular Works,* 3rd ed., 1873. This volume is still the best introduction to Fichte in English which I have found. The memoir which opens it is an excellent account of Fichte's career.

take place in such an interconnected system and indeed does not raise the question. It would seem, however, that if the universe is such a whole with all parts dependent on all others, any change would be impossible, except perhaps a shift in the spatial position of some of the parts. That too would be questionable, for what would cause them to change? This particular doubt, however, did not trouble many people who believed in the organic structure of the cosmos, and it has been a metaphor employed from the days of the Stoics to those of the later Marxists.[6] As far as the German philosophers were concerned the metaphor probably owed its power to their liking for plants as typical of natural processes, a liking which we have already seen in Herder.

(4) If Nature is thus a strictly determined system, human beings insofar as they belong to Nature are also strictly determined in everything which they seem to do. When I think, it is because of natural laws, the same laws as operate in the growth of a plant or the movements of an animal (*ibid.,* 248). Because of the interconnection of natural beings, I am what I am, and it is absolutely necessary that I should be so.

(5) My feeling of freedom is justified only to the extent to which I contribute something to the everlasting series of natural events (*ibid.,* 252). But so a tree, if it were conscious, would have a feeling of being free as it achieved its destiny as a tree. Whenever some other being, the woodsman for instance, intervened in its history, it would feel the blows of necessity, and similarly, when we are not aware of the external causes which act upon us, we too have the sentiment of freedom. "In immediate consciousness, I appear to myself as free; by reflection on the whole of Nature, I discover that freedom is absolutely impossible; the former must be subordinate to the latter, for it can be explained only by means of it" (*ibid.,* 252). For this reason my feeling of activity is an illusion. "I do not truly act at all, but Nature acts in me" (*ibid.,* 257).

These five principles are set down as absolutely true and as the cause of despair. They seem to overthrow the whole structure of morality and to deprive the world of moral value. Why should a man strive for anything, if his striving itself is the effect of causes over which he has no control? Why not relax and let Nature operate as she will? But relaxation itself is beyond one's reach unless one is so disposed by the cosmic order. If this be so, then there is no sense whatsoever in an individual's attempting to be either moral or immoral. He will be whatever the natural order forces him to be. What is wanted is justification for seeking the good with perfect freedom and responsibility. "There shall be a Supreme Good in the spiritual world; I shall have the power to seek this with freedom until I find it, to acknowledge it as such when found, and it shall be my fault if I do not find it" (*ibid.,* 260). Such is man's aspiration. How can he justify it?

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[6] See Stalin's *Dialectical and Historical Materialism,* 1940, published as Vol. XXV of the "Little Lenin Library" by the International Publishers. See esp. p. 7.

Presumably on the principle *ex nihilo nihil* Fichte points out that if he is to be free, he must already contain some free element in his make-up. An examination of his consciousness shows him that when he makes choices he has knowledge of various courses of action. He acts upon one rather than the others. These alternatives are all contained within his thought so that acting upon one of them is the fulfillment of something already present *in potentia.* And action thus becomes an expression of a potency contained within the thought of an individual. But nothing like this seems to occur in the nonhuman world. There everything takes place because of forces external to the being which is changing, nothing changing literally *of its own accord.* My nature is twofold, one part being submissive to natural law, the other to thought. "Thought is no longer the mere faculty of observation; it is the source of action itself" (*ibid.,* 262). This is the key-sentence to the rest of Fichte's philosophy unless I have misread him. Out of it can be derived the whole voluntaristic tradition of our time, a tradition which manifested great variety in its forms but which as a whole fused man's reason with his will.

The second part of the *Vocation of Man* is a justification of this idea. The sensible world is first reduced to a set of Berkeleyan ideas. The notion of an independent substratum is easily disposed of as an *X* of which we can have no knowledge. All knowledge then is seen to be self-knowledge, for even when we are not aware of mental activity—and it is important to note that there is some of which we are not aware—it is still mental, spontaneously occurring as an expression of our unconscious thinking. Even the appearance of an external world turns into a projection of the subjective world. "There is no outward sense, for there is no outward perception. There is, however, an outward intuition; not of things, but this outward intuition—this knowledge apparently external to the subjective being, and hovering before it—is itself the thing, and there is no other" (*ibid.,* 294). In other words the feeling that the world of perception is external to us is no more than a feeling. We see some of our conscious states as if they were not ours, just as in dreams we are unaware of their internality. The reason why this is true is that space is—on Kantian principles—a form of intuition and when we intuit we see things in space. One's consciousness is thus dual: it may be directed toward sensations, feelings, dreams, aspirations, or may project in spatial form the contents of those states of mind. In this way we create an external world which stands in opposition to the internal. The distinction between the Ego and the Non-Ego lies within consciousness itself. "What I call *I,* is therefore absolutely nothing more than a certain modification of consciousness" (*ibid.,* 308).

But this too is disappointing, since the world dissolves into a dream. The dream frees man from the nightmare of a strictly determined cosmos, but it does no more. For the acquisition of a more satisfying universe, man must turn to Faith. Man is aware of something beyond knowledge, but since it is beyond knowledge he must find it by some other means. "The innermost depths of the soul" tell him that his vocation is not "for idle contemplation" of the self nor "for brooding over devout sensations"; "thine action and thine action alone, determines thy worth" (*ibid.,* 313). Just what the innermost depths of the soul are, just what the importance of their message is, why man should listen to it, are left unclarified. But one suspects that the innermost depths of the soul are Pascal's heart, Rousseau's *sentiment,* and the innate ideas of the English Platonists. They are whatever the faculty is which tells us that an answer to a question is unsatisfactory, however logical it may be. That faculty perhaps is that which gives us real as opposed to notional assent, in Newman's terms. It is the compulsion to disbelieve as well as to believe, the urge to commit oneself to a course of action. If I string out these possible synonyms for Fichte's innermost depths of the soul, it is to suggest that Fichte was not isolated in positing some such power. Just as Kant knew that he was a moral being and that therefore the world must make it possible for him to be moral, so Fichte is as certain that he is an active being. "There is within me an impulse to absolute, independent self-activity . . . This impulse I feel along with the perception of my own existence, it is inseparably united to my consciousness of myself" (*ibid.,* 313). Its trustworthiness as a guide cannot be substantiated by knowledge, for knowledge always requires further substantiation. That substantiation in the last resort is always "a voluntary acquiescence," "a resolution of the will to admit the validity of knowledge" (*ibid.,* 317), and hence a man has the right in this ultimate situation to will to believe in his vocation.

The voice from the innermost depths of the soul, or conscience, first tells man that other people are also self-existent, free, substantive beings independent of him. They have their own purposes and freedom to accomplish them, and we must recognize their freedom and independence. This is of course Kant's categorical imperative in the form of commanding men to treat their fellows always as ends, not means. Second, it convinces me that if I act, my action will have an end and that the end must always be better than what I possess or am at present. I must strive for the betterment of the human race. I must work for the conquest of Nature "until, at length, no farther expenditure of mechanical labor shall be necessary than what the human body requires for its development, cultivation, and health; and this labor shall cease to be a burden" (*ibid.*, 332). I must work to reform the cruelty of man to man which in the long run is man's desire for power over others. I must therefore strive for the furtherance of obedience to the categorical imperative. But Fichte is too realistic to think that any one man's effort can achieve these noble goals. And his most pathetic confession appears when he says, "It cannot be intended that those savage tribes should always remain savage . . ." (*ibid.*, 334). For where does his information of the intentions come from and whose intentions are they? They are, as might be expected, the intentions of God, and from here on Fichte writes many an eloquent page on his vision of the future of humanity. It is a vision which few would care to reject, but unfortunately it could be justified on grounds quite different from Fichte's. In fact, he spends less time justifying it than in describing it. Briefly, it rests upon the assumption of the freedom of all men seen as active wills, united and fused into the Absolute Will. Man's vocation then becomes that of living as an integral part of God's Will, which is what man ultimately is. Fichte knows only too well that it will require eternity to fulfill this vocation, but that to him is simply proof that our souls are and must be immortal.

3. SCHELLING

In an early work (1795) *On the Ego as the Basis of Philosophy,* Schelling says that he believes "that man was born for action not for speculation." [7] This innocent sentence contains within it the kernel of a voluntarism which did not stop until the whole cosmos was interpreted as an active being. The will of man which had been so essential to the philosophy of Schelling's teacher, Fichte, was now extended into a metaphysical principle whose domination was much greater than the moral life. Before Schelling concluded his speculations, the whole of Nature became active in precisely the same way in which man was active, with the same goals and the same problems in the achieving of them.

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[7] *Saemmtliche Werke,* 1856, Vol. I, ch. i, p. 243.

If man is born for action, he must be free to act and, consequently, one of Schelling's first tasks was to provide for human freedom. This was accomplished, or at least its author thought it was accomplished, in his treatise called *Philosophical Investigations into the Essence of Human Freedom* (1809).[8] But even earlier, in his treatise on the Ego, he had laid it down as an incontrovertible principle that only in the self-identity of the human Ego could any sound basis for a philosophy be discovered. The basis for the assertion of the self is that of Fichte: it is the one thing that is known with certainty, and the knowledge which one has of it emerges out of action. For self-knowledge in the sense of reflection upon the contents of consciousness can never give us anything but the flux of perception (Hume's impressions and ideas). But we are not asking for appearances; we are seeking reality. And the only reality of which we have primordial knowledge is the subject's self-assertion which is an act. This act is absolutely free, since it is conditioned neither by experience, being rather constitutive of experience, nor by unknowable things-in-themselves (*Werke, op. cit.,* Bk. I, ch. i, 177). It simply *is.* This would amount to little more than nonsense were it not that Schelling has rejected the conception of the human mind as a contemplative being mirroring in some way things and events in a world external to it. He has accepted as irrefutable the subjectivism of perceptual data and also the Kantian thesis that the world owes its organization, its form, to the activity of the mind. The question remains of how and why the mind acts as it does. In Fichte the answer was ethical. The Ego needed an adversary in order to become more of an Ego. The creative act was committed lest the Ego fade into nonentity. Similarly in the early Schelling, the Ego first of all asserts its own identity, and it is an identity which persists through time.

But in order to maintain its identity the Ego must be absolutely free. *Das Wesen des Ichs ist Freiheit* (*ibid.,* 179); the essence of the Ego is freedom. The moment it is conditioned or determined or modified by something not itself, it ceases to be itself; it becomes the plaything of whatever external forces act upon it. How then can we know that which is not an object of knowledge? By what Schelling calls an intellectual intuition (*ibid.,* 181), which requires no distinction between subject and object. This is the kind of intuition which is usually attributed to the beatific vision of the mystics, in which both the mystic and his object are fused into a union which is cognitive without being rational. The Ego remains itself while intuiting itself; it catches itself, so to speak, on the wing. When known in this way it is not objectified. Schelling's anxiety to preserve it from objectification rests upon his assumption, taken over from Kant, that objectification would turn the Ego into an empirical thing like the ordinary objects of perceptual experience. It must be and remain an active subject whose activity must never be diminished. That is why also it must be completely one; its unity must be absolute and permanent. It is in the situation of Plotinus's One who, though all creation emanated from him, had nevertheless to maintain his unity, lest he be submissive to some divisive force from without. And there was nothing without.

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[8] An excellent translation of this work into English was published by Dr. James Gutmann in his doctoral dissertation, *Schelling: Of Human Freedom,* 1936. This edition from which we shall quote in the text above, has a very illuminating introduction on the development of Schelling's philosophy as a whole.

In short, Schelling's basic attitude toward the Ego is that of a romantic critic toward a work of art. The work of art must never be analyzed into its component parts, for fear of breaking down that unity which is supposed to confer a higher value upon it. The pathos of unity is very impressive to a man of this temperament. Collections of disparate elements, even formal constructions of parts which retain their separateness to the observer's eye, seem less valuable to such men than beings whose unity is undifferentiated. There is no point in arguing here the relative merits of unity and variety or even of variety within unity, but there decidedly is point in indicating how our philosophers felt about it. We are supposed then to appreciate a work of art as a whole, not as an assemblage of parts, and it has often been proclaimed that the parts are what they are only in respect to the whole. If this is so, then it could be maintained reasonably enough that whatever multiplicity exists in a picture is determined by the picture as a unified whole; if the finished product were different, then its parts would be different. The analogy between a work of art and the Ego is far from being complete since we know that a picture or poem or piece of sculpture is made bit by bit during a passage of time, whereas the philosopher's Ego is already there when he intuits it, already whole and complete. All differentiation occurs within it. But even when the Ego is thought of as progressing in time, fulfilling its function, achieving its ideals, the functions and ideals are *its* functions and ideals and cannot be explained as things imposed upon it from without. The Ego of the Post-Kantians is the grandchild of the Leibnizian monad which was also self-enclosed, a unit, and an active unit. The monad's history, too, could not be explained by scientific procedures, that is, by any causal relations which it might be supposed to sustain. The only metaphor which may serve to explain what it does is that of exfoliation. Leibniz's God might have His reasons, but the monads behaved according to their own inner natures, and the only difference between the inner nature of one and that of another lay in the degree of activity which they manifested. They too were free in that once created they were determined only by themselves.

Unfortunately for the simplicity of Schelling's theory, tradition demanded that some recognition be made of God, the Supreme Will. One can discount man's dependence on the physical world by pointing out that in the long run it is a creation of the mind. But one cannot so easily discount man's dependence on God, if one believes in God. The human will at first sight then seems to be suspended between a physical world, strictly determined by mechanical law, and the Divine Will. If man's will is somehow dependent upon God's, then in what does man's freedom consist? It turns out to consist in the very nature of God: "God is not a God of the dead but of the living" (Gutmann, *ed. cit.,* 19). An all-perfect Being could not have wanted a purely mechanical cosmos as His child. Whatever else creation may be, it must reflect the freedom of its Creator; it must be God's self-revelation. But if the creatures reflect the being of their Creator, they too must be free and self-activating. It is a long cry from this view of the cosmos to that of the seventeenth-century philosophers who could think of no higher praise of God than that He was a perfect clockmaker. We are now in the age and region where the biological metaphors have become dominant. And consequently Schelling's conception of God is that of a center of infinite power which flows out of Him and becomes individuated in the process. The individuation of His creatures makes it possible for human wills to be individual wills, though Schelling does not explain how the infinite and divine power does individuate itself. He is basing this theory—if it can be called a theory—on his interpretation of Spinoza's *Ethics,* rather than on Plotinus. In Spinoza too the individual minds exist as manifestations of one of God's attributes, but the problem of individuation did not arise for him. It did not arise, one imagines, since he thought of the mind as essentially rational, not volitional, and reason was of such a nature that two reasons would always operate in precisely the same way. But wills, however harmonious they may be in fact, need not be harmonious. And since man was made to act and not to speculate, he must be thought of as a center of action uncontrolled by the necessities of logic. Such volition is indeed "groundless, eternal, and self-affirmative" (*ibid.,* 24). And insofar as the human will exists independently of reason or corporeal determinants, it is precisely like the Divine Will.

But now another paradox arises. It is all very well to strive, to long, to aspire, to act, but all such verbs demand objects. There must clearly be some end in sight toward which one is striving, even if, as in Fichte, the end will never be attained. As we see the Primal Will, it manifests itself in the order of Nature. Volition itself is unordered and undisciplined, but when it strives to realize a goal, it has to bring order into its acts. In Schelling's more rhapsodical language, "All birth is a birth out of darkness into light: the seed must be buried in the earth and die in darkness in order that the lovelier creature of light should rise and unfold itself in the rays of the sun" (*ibid.*, 35). Similarly reason emerges out of the darkness of unreason, and we must envision the progress of the will as the emergence of longing into the clarity of reason. This process to Schelling is typical of all cosmic processes, and the idea which developed into it became the kernel of his philosophy of nature. For as each level of being is unfolded out of lower levels, the cosmic will, still striving and individuating itself, forms new kinds of being. Each of these levels has its own polarity. There is no need to overload these pages with the details of the system, since they no longer could be taken seriously. What is important is that Schelling refuses to relegate the natural order to a realm of unreality, but sees man's fate as integrated into that of the cosmos. The activity of Nature, he insists, is exactly similar to that of man. Whether life differentiates itself into male and female or matter into light and gravity is not of fundamental significance, and in fact it would be next to impossible to dispute questions such as these unless they were made clearer than Schelling left them. But in viewing the cosmos as an interplay between freedom and determinism, with man's will self-determined to seek definite goals, he undoubtedly laid the foundations for later philosophies of nature, such as Bergson's, in accordance with which evolution is neither strictly determined nor strictly teleological. The process can best be named lyrical in the sense that a child's spontaneous singing might be called lyrical. The child does not plan the song ahead of time; he creates it as he sings. We shall, I hope, see how the self-expressive process becomes the evolution of the Idea in Hegel, how by what was called the logic of the situation an act of will leads over to its contradictory. For even if we will to achieve the simplest of ends, that end is the cessation of volition, a denial of the source from which it arose. But since one cannot stifle activity—without annihilating the whole universe—the end itself can never be a "mere thing," but must be also a process striving toward other ends.[9]

Nature then became for Schelling as he advanced in years a stage on which there was constant interplay between two opposing forces, resisting and striving (*Hemmen* and *Streben*). But the forces of striving and resisting were not ultimately centered in two different *things;* they were both manifestations of the one ultimate being and that being he could only call Nature. Now the one common example of a being which manifests tension and inner conflict—other than the human being himself—is the work of art. Few critics of the eighteenth century would have thought of a picture or poem as anything other than a vision of purest unity, coherence, and clarity. Their minds were still dominated by what might be called the Cartesian ideal. But as the Romantic Movement got under way, the work of art was seen to be a balance of opposites, the grotesque and the sublime, unity and multiplicity, form and color, in fact, any pair of contradictories which the critic or philosopher happened to be interested in. The conclusion to Schelling's *System of Transcendental Idealism* (1800)[10] deals with the work of art as a paradigm of the natural scene. The work of art, whatever else it may be, is the product of the artist's free imagination restricted by the material with which he is working. Lessing in his *Laocoön* had emphasized the differences between such an art as poetry and that of sculpture which resided in the differences between words and stone. He attempted to lay down rules which would preserve these differences, rules which forbade the artist to violate the restrictions of his material. But in Schelling one of the principal features of a work of art is the interplay between the artist's intentions and the possibility of their frustration. The ordinary experience of not being able to find words to express what one is feeling is an example of the struggle between freedom and determinism which Schelling saw in artistry. One believes that one has an idea; one discovers that the materials by means of which one can alone express it are inadequate. Yet a struggle goes on to make one's meaning clear. So the sculptor struggles to take a solid and heavy material and to use it to express what might be better expressed in words or paint or possibly even in music.

Moreover the work of art is also a duality of consciousness and unconsciousness, for both the artist and the spectator remain in the conscious world whereas the work of art itself is a material object. The artist is trying to put ideas and feelings into material form, the spectator to draw out of the material form ideas and feelings. The picture is thus more than matter, colored areas on a flat surface; it is the potentiality of feelings from the spectator's point of view and the expression of the same from the artist's. To interpret it from either of these points of view exclusively would be to falsify its nature. So the natural order may be thought of as a work of art, not that it is something created once and for all, a beautiful object which we can contemplate and admire, but as itself both spontaneity and causality. Any natural event for Schelling may be viewed as either a spontaneous force or a limiting and frustrating force. It would be just as false according to his way of thinking to interpret Nature as a sheaf of undetermined spontaneous forces or as a mosaic of atomic parts bound together into a static pattern. It is a fusion of both. The Creator's will did not operate by first reasoning out a pattern which He wished to follow in material form; the artist, too, thinks in terms of his material. The cosmos must then not be thought of as the accomplishment of a preformed idea; the idea itself included its realization. Just as it is impossible to put a poem into stone or paint, so it was impossible to put the cosmic scheme into any other form than that in which it occurs. It will be observed that such a theory of artistry eliminates any consideration of *genres* except in the most abstract manner. What is important about, let us say, *King Lear,* is not its exemplification of the class "tragedy," but its own individuality, its own peculiar and unique manifestation of Shakespeare's creative impulse and the possibility of satisfying that impulse through words. We shall see a similar theory when we come to Croce.

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[9] A brief and compendious statement of the essential points in Schelling's argument will be found in his *Neue Deduktion des Naturrechts* (1795), particularly in the opening paragraphs. See *Werke,* Bk. I, ch. 1, p. 247.

[10] *Werke,* Bk. I, ch. iii, p. 327.

There is still another feature of art which was all-important for Schelling. That is that he supposed the spectator to grasp the work of art as a whole in a single glance. The immediacy of comprehension made aesthetic knowledge different from rational knowledge or sensory intuition, for unlike rational knowledge it was not discursive, proceeding step by step from premises to conclusion, and unlike sensory intuition it "said" something. One may wonder why immediate knowledge is any better than any other kind, but tradition even today maintains that it is better to know than to know-about, and I suppose that no one would deny that the kind of knowledge one gets from looking at a picture is better than the kind one gets from reading books about it. At any rate it is different, though why it should be called "knowledge" is less certain. But if it is actually possible to grasp the entire meaning of a picture or poem in an immediate act of comprehension, then it must be admitted that something unique has been discovered in the field of cognition. That Schelling gave such importance to art is worth recording since he was one of the earliest philosophers to do so. When he calls art the "organ of philosophy," he is giving to the artist a rank which he had never had before. Aesthetic intuition rises above both science and ethics and the highest value becomes, not truth or goodness, but beauty. Beauty, however, like all other distinctions, evaporates into the absolute identity of the conscious-unconscious whole, so that in the long run it becomes impossible to make any clear and distinct assertion about any one feature of the universe.

4. SCHOPENHAUER

Intellectual intuition according to Schelling was the most perfect form of knowledge, for it combined within itself the advantages of direct inspection and those of intelligence. Since we grasped the significance of works of art by its means, and art was the principal "organ of philosophy," an intellectual intuition of the natural world would be presumably the goal of all philosophers. But an intellectual intuition gives one a symbol of the universe, a sort of emblem, which synthesizes all contraries in one grandiose image. Post-Kantian German philosophy proceeded by the erection of basic metaphors which became cosmic myths, or what the late Professor W. P. Montague called "great visions." Instead of advancing step by step in logical sequence after a preliminary analysis of a single problem, in the fashion of both the English Empiricists and the descendants of Descartes, the Post-Kantian idealist first formed a vision in terms of which he believed himself able to reinterpret not only the basic elements of human life but also those of the universe itself. He was seeking a single all-inclusive formula, such as the Principle of Identity, out of which all else could be derived by dialectical means. We have seen this operation in Fichte and Schelling. We have seen Kant's Practical Reason turn into the active will of Fichte and Schelling. In Schopenhauer (1788–1860) this will is retained as the central fact in the universe, and its nature is used to solve problems arising not only out of the human situation but even those supposedly involved in the nature of the universe as a whole. From his doctoral thesis *The Fourfold Root of the Principle of Sufficient Reason* to his later essays his voluntarism grew until it was extended into every corner of the world. But it was voluntarism with a difference, and indeed Schopenhauer's philosophy as a whole is unique in modern philosophy, both in its structure and in its consequences.

The *Fourfold Root* is, as its title suggests, a detailed study of the Principle of Sufficient Reason. This principle, which was a particular favorite of Leibniz, was usually stated baldly as the rule that nothing occurs without a sufficient reason why it should be as it is and not otherwise. Sometimes the reason in Leibniz is causal and sometimes purposive, and one of Schopenhauer's tasks was to show how the two kinds of reason differed. For him a cause could only be the cause of a change and changes could occur only in the states of things, their attributes or qualities or position in space, never in their substance. The substance or matter of anything was immutable, for the simple reason that there must be something which supports or undergoes the change but which does not itself change. This idea was necessitated by the traditional idea of substance as well as by the theory which Schopenhauer accepted from Kant that the qualities of things are contributed to them by the mind. But if substance itself is immutable, then it cannot be a cause of any change and we must look for causation only on the level of the perceptual screen. Thus far he agrees with Hume but proceeds to correct Hume by demonstrating that the necessity which we find in the causal relation is not the effect of habit but is due to the operations of our own mind. The Principle of Sufficient Reason then will not be proved since it cannot be proved. It cannot be proved since it is that on which all proof rests, and when we attempt to prove it we argue in a circle. Causation is its application to series of changes in the world of observation; reason has nothing to do with this world but is confined to inference which Schopenhauer maintains has nothing to do with existence. Reason will be found in logic; causation in natural science. Reason emerges out of the implications of our ideas; causal laws out of observed series of changes. But both are an expression of our ways of thinking.

But along with logical necessity and physical necessity are two other types of necessity: mathematical and moral. The distinction between logical and mathematical necessity would be rejected nowadays as illegitimate since mathematics has been derived from logic. To Schopenhauer logic was still the "art of thinking" and its rules, since they applied to all thinking regardless of whether its subject-matter was mathematical or not. Moral necessity is the compulsion we all, animals as well as men, experience when we are presented with a motive to do that which is in accordance with our innate and unchangeable nature. Moral necessity is not always recognized since we are too ignorant of the minute and numerous elements of animal life. The living will is not free in the sense of being able to do anything whatsoever. It appears free only because we are ignorant of that which impels it to do what it does. Absolutely free will in the sense of the will's being able to act without motivation and in either of two contradictory manners seems nonsensical to Schopenhauer. The will acts to satisfy itself, and the kinds of satisfaction which it chooses are determined strictly by the kind of will it happens to be. The will of one kind of beast seeks one kind of life and that of another, another. If human beings differ in their aspirations, it is simply because they are more individuated than other animals. But given any man, he will be found to act with consistency insofar as his fundamental nature is known. The only trouble with this theory would seem to be that one knows a man's nature by what he wills.

The Principle of Sufficient Reason then becomes for Schopenhauer the principle of all explanation and is differentiated according to the subject-matter which is under discussion. One should not attempt to answer physical questions with moral answers or logical questions with physical answers. The Principle is a synthetic expression of four specific types of explanation. Since these types of explanation apply to four types of being, none of them can be applied to the universe as a whole, in so far as the whole is conceived as a synthesis of its four parts. Moreover, the parts all belong to the phenomenal world in which alone will be found time and change. The universe as a whole can be assigned no cause, no purpose, no motive, no sufficient reason, and Schopenhauer's claim to be a true disciple of Kant is justified in that he also believes no metaphysics to be possible if metaphysics is to be expressed by the Pure Reason. There is no reason for the Principle; it is the reason itself. A metaphysics must be therefore constructed in some other fashion and by some other tool.

That tool turns out to be the will itself. But since nothing universal can be explained, Schopenhauer concludes that the will must be self-substantiated. It is simply the will-to-live and living is its goal. The development of this thesis is found in Schopenhauer's major work, *The World as Will and Idea.*[11] The word "idea" in this title is in German *Vorstellung,* sometimes translated "representation." It denotes the Lockean rather than the Platonic idea and thus represents an object which cannot be directly perceived. Thus a sound would be a *Vorstellung* representing the appropriate airwaves which themselves are not perceived except as sounds.

In the *Fourfold Root* Schopenhauer had given a detailed account of how the mind manufactures ideas. This work, according to its author, serves as an introduction to the larger one. It introduces it in the sense of laying down arguments which will fortify the theory that the world as we perceive it, its qualities and its organization, is a product of the mind. The subjectivity of the qualities had been proved by Berkeley and Hume, of the organization by Kant. Schopenhauer emphasizes this, extends it to the past and future, in order to show later that the fabrication of an objective world exists for the satisfaction of the needs of the will. Deeply learned in the biological and psychological theories of his day—the first edition of *The World as Will and Idea* appeared in 1818—he attempted a demonstration of the utility of a world of ideas. But since ideas are always the ideas of a mind, the one reality which we can intuit directly, the problem is transmuted into that of explaining in what the mind consists. It cannot be a thing, in the sense that a material object is a thing, a spiritual substance which reflects as a mirror the external world, for that kind of mind had been destroyed once and for all by Kant in his first *Critique*. Whatever Schopenhauer may have thought of his post-Kantian colleagues, those professors with whom he was exasperated, he was developing a notion which both Fichte and Schelling had already adumbrated, that the mind was essentially a kind of activity. But, shrewder than they and less addicted to proving traditional religious tenets, he was able to follow what he believed to be the implications of his premises to their logical end. In this respect, and in this only, he resembled Spinoza. For Spinoza also accepted a method and certain assumptions about the universe and by a rigid logical procedure drew out of them an entire philosophy which went so far beyond the philosophy of his predecessors that it became a complete repudiation of them. The comparison is of peculiar interest to historians of ideas since both men illustrate what happens when a philosopher is free to pursue his studies with a minimum of preconceptions.

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[11] Since my practice has been to quote from standard English translations when there are any, I shall use Haldane and Kemp's translation of this work in three volumes, 1883.

The world of external objects is known to the mind, whether animal or human, through the immediate feeling of bodily changes, changes in vision, hearing, olfaction, and so on. But as soon as a change is felt, a cause is assigned to it. The assignment of a cause is not the result of reflection, of abstract thinking, but is as immediate and intuitive as the feeling of the bodily change itself. Because of it there arises the perception of external objects. Thus when our brains are influenced by light rays through the optical apparatus of our eyes and optic nerves, it is our bodies which are modified; but we see the visual object as something external to our bodies. We do not feel the color as a bodily change, though it really is one, but immediately project it into a world external to both our bodies and minds. If we did not do this spontaneously and immediately, we should have but the dimmest consciousness, as in the moment of awakening from sleep. But the change from dull sensation or feeling to clear perception could not come about if nothing were involved but the sensory nervous system. If that were the unique source of perceptual knowledge, we ought to see two objects since we have two eyes, objects upside-down since the image on the retina is inverted, and so on. Since somehow or other we succeed in fusing the two images into one, in inverting their vertical axes, some other power must be involved by means of which we interpret what we see. That power Schopenhauer calls the understanding which operates unconsciously through the causal law (*ed. cit.,* Bk. I, 15).

It would seem to follow that the external world is somehow unreal. Few terms are more ambiguous than "real" and "unreal," but Schopenhauer warns his readers that he is not maintaining the relation between subject and object to be causal. There can be no causal relationship, he maintains (*ibid.,* 16), except among objects. The relationship between subject and object is prior to all knowledge and the Principle of Sufficient Reason does not apply to the subject whose instrument it is. The subject and object form a realm apart, division within which is made simply for purposes of discussion. The objective world as a set of ideas is organized through the causal law. It is quite as real as anything else and is neither the effect of the subject, to which causality cannot be applied, nor its cause. It is not independent of the subject since it is a set of ideas and ideas which are organized by the understanding. Schopenhauer here is fighting the theory of a blank mind on which an alien and external world of a nature entirely different makes its impressions as well as that of a mind which pours out of itself a collection of sensory qualities. He is taking seriously the Kantian theory that causality is a category of the understanding and that it must be limited to that domain in which it properly applies. We have already seen the difficulties which arise out of the theory that two entirely different kinds of things can sustain a causal relation. Leibniz' famous figure of the mill in which wheels and belts go moving around was elaborated to show how impossible it was to derive mental beings from a purely material source. Somewhere in the series of events a surd would arise, in this case the emergence of the idea. It is likely that in the back of Schopenhauer's mind lay the traditional notion that causation demanded an identity of substance lest the dictum *ex nihilo nihil* be violated. Hume's protest against the reading of necessity into regularly repeated series of events led some philosophers to reinterpret causation and to maintain that if we could establish such regular series, we had explanation enough. But since one could not infer from the proposition "B always follows A" the proposition "B necessarily follows A," the traditional view of causation persisted.

If the power of forming objects through the immediate intuition of space is common to all life, then the animals as well as human beings must share it. No reasoning is involved: the dog snaps at a piece of meat which is thrown to him as if he already had judged the spatial distance between his mouth and the meat, just as a man leaps over a barrier without first calculating its height with a measuring rod. Reason is a transformation of the immediately perceived relations between things into permanent abstract thoughts. It has nothing to do with immediate knowledge. We all begin with the immediate objects of the understanding, whether we are scientists or animals, and the only difference between minds is the degree to which they are able to make these abstractions. The discovery of a great scientific law, like that of gravitation, is made first as "an immediate intuition . . . an *aperçu,* a flash of insight" (*ibid.,* 27). Reason then justifies this flash of insight by incorporating it into a system of abstract ideas, just as it justifies our practical plans for future action. A person then may be very agile in understanding without being capable of much reasoning, and similarly animals themselves may vary greatly in grasping causal relations and none of them, as far as we know, do any abstract reasoning. In human beings understanding and reason support each other. Our abstract concepts take the place of direct experience or memory. But a good part of life can continue to go on without much in the way of reasoning. Nevertheless this power distinguishes us from our brothers, the beasts. Like them we will; unlike them we think and know (*ibid.,* 47).

The abstract ideas by which we think and know are distinguished from the concrete ideas of perception. They are the ideas of classes of ideas. Schopenhauer exemplifies them by such ideas as "relationship," "virtue," "investigation," "beginning." They are ideas of ideas. But though they are all-important for thinking, they are useless for practice. "We must . . . remember that no one ever became an artist by the study of aesthetics; that a noble character was never formed by the study of ethics; that long before Rameau men composed correctly and beautifully, and that we do not need to know thorough-bass in order to detect discords: and just as little do we need to know logic in order to avoid being misled by fallacies" (*ibid.,* 58). This is especially true in the case of logic, since logic is the formulation of the methods by which we think and have to think; it is a complete and self-contained discipline. Insofar as it throws light upon the procedures of reason, it is highly valuable. It illuminates the nature of reason, but that is all. This is not said in depreciation of the subject, but rather in the hope of showing its true place and value in life. Yet it grew out of practical needs, Schopenhauer maintains (*ibid.,* 61), for it arose from the practice of debating. This notion that pure theory arises out of practice was to become a cardinal point in a philosophy contemporary with that of Schopenhauer, namely, the philosophy of Auguste Comte. But theory is not a control of practice except accidentally. It is always susceptible to correction from practice. Nevertheless, it is not to be despised. For rational knowledge is universal in scope, communicable through language, and capable of preservation. Direct sensory perception is limited to the moment and place in which it is experienced and has no relevance to anything else. By substituting concepts for percepts, one may deduce accurate results which will be certain. If our reasoning is correct, the anticipated results will follow. It is thus useful as well as elegant. Its greatest value (*ibid.,* 72) lies in its ability to be preserved and communicated, and the obvious value of this for social life needs no justification. But all this cannot take the place of direct intuitive discovery and when it is substituted for it, may lead only to irresolution. It should, in short, be kept in its proper place, and that place is not the place of the understanding. Understanding, direct perception, is the ultimate ground of all reasoning; it furnishes those absolutely true premises upon which theory is based and which serve as a test of its truth.

Now no matter how much we may know of the world about us, we shall never be able to penetrate into its inner nature. For the world of knowledge is the world as idea, and ideas are representations of things which exist beyond them. All science, however detailed and well organized, is bound to be limited to the powers of thinking, and this will give us nothing but images and names. "We are like a man who goes round a castle seeking in vain for an entrance, and sometimes sketching the façades" (*ibid.,* 128). What makes us think that there is anything other than a façade to this castle round which we move? Only the fact that we too live in such a castle, the body, which is to us a set of ideas, and yet we immediately are aware of a force within which activates it. This force is the will. In this one case we are aware both of the outer and the inner nature of something. The body exists as an idea in perception, behaving in accordance with all the laws which govern the behavior of other bodies. But, happily for philosophy, we also are aware that to every act of will there corresponds an observable movement of the body which is its outward expression. It is not the effect of the act of will but the act itself viewed from without. Thus we can say that the body is the act of will objectified. Schopenhauer is careful to distinguish between resolutions regarding future action and genuine acts which are occurring now. The former are simply rational deliberations from which no act may eventuate. The relationship between the will and bodily action is so intimate that it is possible to say that just as every act of volition is also a bodily act, so is every impression made upon the body an impression made upon the will. "As such it is called pain when it is opposed to the will; gratification or pleasure when it is in accordance with it" (*ibid.,* 131). Only those impressions which result in sensory data are irrelevant to the will. They are the source of ideas. Yet when they are abnormally strong—as in blinding light or deafening noise—they will affect the will as pain. The identity of will and body cannot be demonstrated, since there are no ideas corresponding to it. It is a philosophical truth from which all logical, empirical, metaphysical, and metalogical truths follow. To paraphrase Schopenhauer's argument one might say that self-consciousness cannot be proved; it has to be experienced. The trouble arose when he came to interpret involuntary movements, respiration and the pulse, for instance, as voluntary. In such cases, as in the case of admittedly material motions, he had recourse to unconscious volition. His treatise on *The Will in Nature* is an illustration of how he worked out this type of interpretation.

The pessimism for which Schopenhauer is most famous followed directly from the theory of the will's nature. If the will is the will-to-live, all its doing must be thought of as ancillary to its own satisfaction. To say that life is either good or bad becomes nonsense, since those two adjectives are supposed to denote ends which can be justified intellectually. In his own language the will is groundless (*ibid.,* 138), and it is only its manifestations in the world of the understanding which can be explained. Since explanation always proceeds according to the Principle of Sufficient Reason and that principle has no relevance to the will itself, all the motives in the world will be ineffectual in modifying its conduct. It simply hungers after life and whatever will satisfy that hunger will be of value to it. We are back again at Duns Scotus's God, at Machiavelli's Prince, at Hobbes's sovereign, at Rousseau's common will, at Kant's Practical

Reason. To use the traditional slogan, a thing is good because we want it; it is not wanted because it is good. Because the brain is an organ needed by the will—like all other organs—for its own purposes, thinking must be revalued in terms of the will, and presumably even truth will be determined by the vital need which it justifies. Strictly speaking, the world is no more bad than good but, for some reason or other, Schopenhauer seemed to feel that failure to attain an end which was good in itself was an evil. Here he had more common sense but less consistency than his pet antagonists, Schelling and Hegel. To continue striving for unrealizable ends seemed foolish to him, an example of how the will cheats us. But who is being cheated? If we are the will, not something which possesses a will, there is no way for the will to cheat anyone other than itself. The reason may indeed be an instrument devised for vital ends, but in that case one might be expected to declare those ends self-justified and to construct a scheme of values in which the good would be all that furthers living and evil all that hinders it. It was this step which Nietzsche was to take.

To those of us who live in the post-Freudian period it will seem as if this theory of thinking was Freud's theory of rationalization. Freud had read Schopenhauer, according to his official biographer,[12] and it is at least plausible that his belief in the subordination of reason to the will was suggested to him by Schopenhauer. The theories are far from being identical except in this one point, and furthermore Freud provides a victim for the intellect in the social group which makes demands upon the individual that he cannot honestly fulfill. Why these demands should be made is no more explained than why Schopenhauer's will should fabricate reasons whose ostensible purpose is different from their real purpose. If the Freudian will is sexuality and if it is homogeneous, the same in all men at birth, it is strange that groups of men do not recognize its true nature and that society is not so organized as to satisfy it. If each man's will is individual and may vary congenitally, let us say, from heterosexuality to homosexuality, then the clash in ends could and probably would create social conflict. But that is not his theory. So in Schopenhauer the will is homogeneous in the human race, striving after the same satisfactions and yet unwilling to exhibit itself in its true nature. Schopenhauer's pessimism is a reversion to an intellectualistic scheme of values which seems hardly congruent with his metaphysics. If knowledge "proceeds originally from the will itself . . . a means of supporting the individual and the species, just like any organ of the body" (*ibid.,* 199), then one would imagine that we should proclaim anything which gave that support good and anything which impeded it, bad. So we usually do, says Schopenhauer, but we ought not to.

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[12] See Ernest Jones, *Life and Work of Sigmund Freud* (New York: Basic Books, Inc., 1953), Vol. I, p. 375.

Our problem, then, is that of defeating the will-to-live. This can be done in only two ways: by contemplation of the Platonic Ideas in works of art and by identifying ourselves with others through charity. The former way defeats the will since, following Kant, a work of art has no practical claims. There is nothing that we can do to prevent Macbeth from committing murder or King Lear from being a senile fool. We do not eat the food and drink the wine in a Dutch still-life nor like Pygmalion fall in love with our statues. A work of art freezes life, and when we enter into it we are in a timeless and spaceless world in which the will is powerless. Similarly when we look upon the insane striving after life on the part of our fellow beings, pity for their insanity may lead us to deny our own will and through resignation to achieve a state of holiness. Quoting Calderon (*ed. cit.,* Bk. III, 420), Schopenhauer maintains that the greatest sin of man is being born, for his differentiation and separation from the Primal Will which pervades all creation is the occasion of all his suffering and eventual death. The true solution of our difficulties is that preached by the Buddhists, emancipation from all desire and hence from all individuality. One who shrinks from so profound a denial of life had best first read the concluding chapters of *The World As Will and Idea* and then turn his eyes to the spectacle of world conflict, programmatic deceit on the part of groups as well as of individuals, organized hypocrisy, and cruelty on a scale never before equaled in human history. If ever there was a period in which the theory of the primacy of the will seemed exemplified, this is it. It cannot be denied that the twentieth century has seen greater scientific and technological success than any of its predecessors except that between 1450 and 1550. But in both instances our knowledge was put to the service of our desires and those desires were held to be self-justified. Despite almost universal intellectual education, our moral education is as rudimentary as ever, and though organized religion makes feeble protests, the faithful are as nonchalant about applying the ethical standards which they profess to believe as the infidels. It is with a kind of relief that one turns to a man who was willing to take the consequences of voluntarism and preach a reversal of all values, Friedrich Nietzsche.

5. Nietzsche

An obstinate duality eventuating in conflict is found in all the post-Kantian philosophers, and most of them attempted either to explain it away or to absorb it into a synthesis of which the two conflicting elements would be necessary parts or aspects. In Kant himself the conflict arose between the understanding and the reason, the Pure and the Practical Reason, the world of phenomena and that of noumena, fact and value, and was "reconciled" in the work of art and the faculty of judgment. In Fichte the conflict appeared in the opposition between Ego and non-Ego, the ideal and the real, the striving and the goal, and was reconciled in the absolute identity of the Ego or God. In Schelling the conflict arose out of the absolute identity of the Ego which obtained meaning through differentiation, between spontaneity and determinism, between all the polarities which the cosmos exhibits, and again was reconciled in the Absolute known through intellectual intuition and symbolized in the work of art. In Schopenhauer the conflict was to be found pretty nearly everywhere: between sensory intuition and reason, reason and will, the affirmation of the will to live and its denial, and the reconciliation again was effected through art and renunciation. When one comes to Nietzsche (1844–1900) the conflict appears between two kinds of will, two temperaments, and at times within the individual himself. But the reconciliation is never attempted for the simple reason that he saw the inevitability of conflict as essential to life itself.

Though he was strongly attracted to Schopenhauer as a youth, Nietzsche soon saw that the denial of the will to live was not a program. Perhaps influenced by popular interpretations of Darwinism, he maintained that living itself could not go on without conquest. One cannot just live. One is situated in an environment which must be mastered lest it master one, surrounded by competitors who also wish to live. Natural selection pursued its course not merely by the environment's eliminating those individuals who were unfit to survive in it, but also by the other individuals who fought for their own lives and for the perpetuation of the race. Darwin had learned from Malthus that many individuals must die out from lack of food and that some were more able to get food than others. He also knew, as we all do, that natural selection is supplemented by sexual selection and the struggle for food is supplemented by the struggle for mates. Whatever may have been Darwin's own philosophy of life, his readers were often impressed by the element of struggle, and many of them maintained that if only those fit for survival survive, we should let the weak go to the wall. Hospitals, insane asylums, schools for the mentally retarded, in short brotherly love, mutual aid, and cooperation were stupid follies fostered by the weak to further their own ends. Such things were a vain protest against Nature's laws. Men should accept the struggle for life in its simplest form, favor the strong and let the weak perish.

It was in vain that writers like Kropotkin pointed to the social organization of many animals, not merely that of men, which demanded mutual aid if the individuals were to survive. To such men the struggle for life was a concern of the group, not of the individual. In fact, there had been a long tradition that emphasized the kindliness of the lower animals toward their fellows and the singularity of internecine war among the human beasts. Such protests seemed to have less charm for their readers than the Neo-Darwinian war chants. Human warfare had seemed to be one of the differentiae of men, and in an age of conquest it may have appeared to be an expression of humanity less to be deplored than praised. Protests against war which have reappeared in the twentieth century may be, or probably are, due to our growing realization of its futility, rather than to any revulsion against its cruelty. So long as wars paid off by territorial expansion into the lands of inferior peoples, few worried about them. Those few seemed to the more bellicose to be sentimental fools incapable of meeting the hard challenge of our animality. Even now after two most horrible and devastating wars which involved almost the whole world, the main argument against war is that no one wins.

Nietzsche was not a Neo-Darwinian, though his philosophy could be assimilated to that vague and lyrical creed. His philosophy flowed out of that of Schopenhauer as Schopenhauer's flowed out of Kant's. To him the will was self-substantiated, just as it was for his master, and the principal change which he made in the basic premises was that of giving a target to the will, power. Nietzsche's will-to-power had no further aim. To ask what the power was for was senseless. Power was a good-in-itself, the one terminal value which could never be denied.

But the will-to-power might be manifested in two forms, that of the slave and that of the master. The slave gains power over others by submission, meekness, turning the other cheek. His obedience lulls the master to sleep and thus permits the slave to gain the upper hand. This, Nietzsche maintains, is the explanation of the rise of Christianity. Christianity is the religion of slaves; it glorifies all that make men good slaves: chastity, poverty, obedience. It is a denial of life. That Christianity denies this life for another is true, and that it first arose among the oppressed is also true. That it arose to be the dominant religion in Europe is obvious. But that it arose to such dominance by enforcing a slave-morality—using the term in Nietzsche's sense—is far from being even plausible. Neither Constantine nor Gregory the Great were meek and submissive. And when the Protestant Reformation succeeded, it was scarcely because of the meekness of either Luther or Henry VIII. Be that as it may, the ethics which it preached was on the whole an ethics of resignation, not of rebellion.[13] The main question which arose in the minds of Christian moralists was how far resignation should go. For on the one extreme was the quietism of Molinus and on the other the burning zeal of the great reformers. There has been to the best of my knowledge no measuring instrument devised to inform a good Christian of the limits of either affirmation or negation.

The ideal master to Nietzsche's way of thinking was Machiavelli's Prince, Cesare Borgia, who was also the hero of Gobineau's *La Renaissance*. Such men were pictured as knowing what they wanted and as defining the good as the satisfaction of their wishes. There was no one to tell them what they should want and, had there been, they had no reason to listen to them. Goodness was that which was pleasing to their will and the only ethics which they needed was a book of recipes for getting it. Power, then, is that which procures satisfaction, and there is no distinguishing between a good and bad use of power except in the instrumental sense of those two adjectives. Any use of power which achieves the desired results is good; any that fails is bad. Consequently bravery is the greatest of virtues. *Was ist gut? Tapfersein ist gut.* For bravery is the very essence of the strong will. Bravery will overcome all obstacles. Bravery and its accompanying virtues are to take the place of the older virtues. They result from a revaluation of all values or, to put it more literally, from a devaluation of all values. The bravery which consists in obeying the orders of conscience regardless of personal suffering, the bravery of martyrdom, was never given its due by this thinker. But in all justice to him it must be pointed out that the second half of the nineteenth century was scarcely one in which frank and honest sincerity was the most noticeable virtue. Whatever one may think of the philosophy of Karl Marx, and we shall have something to say of it later on in this book, his aphorism that religion was the opium of the people was pretty well justified as of that period. For most organized religions, in distinction to such faiths as that of the Friends, did preach resignation to poverty and its attendant evils. The various churches did little if anything to root out the causes of human misery, and the charity which was extended to the poor in the form of alms was but a microscopic alleviation of the troubles of society. Alms-giving may have done good to the giver, but it was at best only a palliative to the recipient. Nietzsche was not alone in castigating the hypocrisy of the religious leaders of his time.

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[13] Cf. the Encyclical of Leo XIII, *Diuturnum*, dated June 29, 1881. This may be conveniently found in English in Gilson's *Church Speaks to the Modern World* (Garden City, N. Y.: Doubleday & Co., Inc., 1954).

If the will-to-power is self-substantiated, then we have passed beyond good and evil. Just as in Schopenhauer the will-to-live is neither good nor bad but creates both, so in Nietzsche all values are to be redefined in terms of his will. Each is made by the situation in which the hero acts. Thus there is no pasting of value-labels on acts as such. No act in itself is anything more than an expression of the will. Arts like music and dancing which are dynamic become more fitting for the master than arts like painting and sculpture. Wagner, especially the Wagner of *Parsifal,* is to be supplanted by the Bizet of *Carmen.* The bullfight which is a test of courage expended in a spectacle would seem to be the most perfect dance. The bullfight is a struggle between wills to no end. The bull is not eaten by the matador; the matador is not, like Bellerophon or Perseus or Saint Michael, exterminating a pest. The bull is bred for one purpose alone, to fight. It is the very senselessness of the combat which gives it sense. It is a perfect example of what Theodore Roosevelt called the strenuous life, more perfect than mountain climbing, senseless as that is too, since the bull is at least alive and the struggle is between two individuals. Its glorification in our own day by such writers as Ernest Hemingway is an indication of the spread of Nietzsche's ideal. But the revaluation of all values goes beyond ethics and spreads into logic. Truth too for Nietzsche must be superseded and in its place will be put belief. What the strong man needs to believe becomes true. "There is no God," says Nietzsche, "for if there were, I could not bear not to be He." Here is an excellent demonstration of how an apparently innocent theory can be developed into unpredicted forms. When Kant announced that the Practical Reason could affirm as true those propositions which it needed for its task, he could little have foreseen how the same principle would have been applied by his fellows. But if the brain is an organ developed for its utility in survival, then its functions must be valued for what they can do for survival. And if survival is supplanted by mastery, then thinking must be oriented toward mastery. The value of thought will then be determined pragmatically and truth is fixed by an act of will. Yet, as far as I know, Nietzsche never maintained that he accepted the idea of the primacy of the will-to-power simply because it gave him the results which he wanted, though in fact he may have done so. The primacy of that will was true in the old-fashioned sense of the term; it was a fact that one was forced to accept for the same reasons that one accepts any other factual truth, the rotundity of the earth or the procession of the seasons. One cannot by an act of will determine the consistency of geometrical theorems, or the appearance of the seven spectral colors. When one comes to the choice of one's premises, since they cannot be proved logically, they must indeed be accepted by fiat. Similarly the choice of problems, what one will attempt to prove, the *demonstrandum,* is chosen freely. In the third place the method of research and demonstration is only partly determined by the problem. But this is far from saying that truth as a whole is based on free choice, to say nothing of the choice of masters.

The notion of who the master was preoccupied Nietzsche during a good part of his life. In his most famous work, *Thus Spake Zarathustra,* he is symbolized by the man alone on the mountaintop with the eagle and the serpent. "Above the bull's neck, I see the eagle's eyes," he says. And the eagle by tradition was alone able to look the sun in the face without blinking or becoming blinded. This is indeed a lofty figure of speech, and if ever a man was to cure Europe's sickness he would have to alienate himself from the crowd and have the vision of the eagle and the guile of the serpent. But by this time Nietzsche cared little for curing Europe. His task in that book, assuming that he had a task, was to cure the individual. The great mass of mankind was hopeless. But out of it might emerge a few chosen individuals who had the strength to live on their own resources. These wills, who were to be as far above mankind as man is above the apes, were not the product of evolution but were to create themselves by self-mastery. It was perhaps this program, more than his hope in the evolutionary process or even eugenics, which proved to be the greatest stimulus to the youth of his time. For as industrialism and its attendant standardization of minds increased, thinkers were more aware of the dangers of individuals becoming nothing more than social atoms. The generation of Bernard Shaw, Havelock Ellis, and Georg Brandes found in *Zarathustra* a way out of the labyrinth by leaping over its walls into freedom. The individual need not conform; he was free to rebel. The poet and the artist in general could cut themselves off from social entanglements and even if they ruled only in Bohemia, they at least could rule. Their empire was no broader than the frontiers of their own souls, but the mountain peak of Zarathustra was no broader. The proclamation of art for art's sake, of creating for oneself alone—for the two slogans were in reality one—was a protest against the claims of the social order. It meant the death of schools of art and the birth of the completely independent artist. If one had to choose the typical spokesmen of this movement, one would add to the name of Nietzsche those of Whitman and Romain Rolland.

But one could also interpret Nietzsche as the proto-Nazi, though his contempt for his fellow Germans was as great as Schopenhauer's. Socialism whether national or international was scarcely to his taste. But the idea of mastery as a good-in-itself, especially when it was embodied in the person of a *Fuehrer* whom the groveling masses would obey without question, might not have displeased him. The ruthlessness of the Nazi leaders in obtaining their ends, their myth of racial superiority, their treatment of their supposed inferiors could all be justified by certain passages of his works. Moreover, there is so little system in his thinking that it is downright impossible to say what is the real Nietzsche and what the unreal. When one is confronted by a collection of aphorisms one is bound to find inconsistency. For the usual logical transitions from thought to thought are by the very nature of the case missing. One might as well try to bring order out of the mass of popular proverbs as to find a system in this writer. His thoughts exploded in disconnected epigrams whose arrangement on the printed page gave an illusion of order, but an illusion only. In a milder way one sees the same thing in Emerson, who was just as incapable of developing an idea in well-organized essays. But it is often such men who have the greatest influence.[14]

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[14] For an account of Nietzsche as a proto-Nazi, see Crane Brinton's *Nietzsche* (Cambridge: Harvard University Press, 1941), esp. ch. viii.

CHAPTER 17

Reason Disciplined

As early as Schelling's *Transcendental Idealism* (1800) the suggestion had been made that self-consciousness has a history. We attain clearer and clearer consciousness of ourselves as we grow, or, in the words of Josiah Royce, the self is an achievement, not a datum. But the problem of how this proceeds, by what steps one attains complete self-consciousness, whether those steps are ordered or random, what relation, logical or ethical or aesthetic or other, binds them together, whether the progress is from worse to better and in what sense, was left obscure.

1. HEGEL

It was the lot of Hegel (1770–1831) to see this problem, and in his first important work, *The Phenomenology of Spirit* (1807), he outlined in some detail the history of the human mind from simple consciousness to what he called absolute knowledge. The procedure by which consciousness evolves has been called dialectical, rather than logical. It is dialectical in that the various stages in the mind's history present emerging problems which for the simple reason that they are problems demand answers. One may be conscious without knowing what is involved in being conscious. But Hegel has the advantage of being a philosopher, and he is writing as if the human mind put to itself the problems inherent in its behavior. Thus the mind merely conscious of sensory impressions is described by him as asking itself what it is actually doing, what is the "meaning" of sensory consciousness, how it is possible. The obvious fact that no purely sensory being would put such questions to himself is irrelevant. The kinds of consciousness which Hegel is analyzing are theoretically pure. They serve the function that in other contexts the economic man, man in a state of nature, Adam before the Fall, or perhaps—though this is more doubtful—the characters of Theophrastus served. Given then a type of mind, says Hegel in effect, what would be involved in its nature? So Schopenhauer later was to say, given the will-to-live, what would be its relation to reason; or Nietzsche, given the will-to-power, what would happen to our traditional system of values?

There was, however, more to the *Phenomenology* than this. The dialectical evolution of consciousness displayed a pattern which Hegel was to abstract in his *Logic* and then to apply to all historical processes, whether they be exemplified in the history of philosophy, of political institutions, of religion, or of art. This seemed to entail the belief that logical order is also chronological, and indeed by shrewd analyses of the sequence of certain historical events a surprising number of pertinent examples were brought out by him. The danger that confronted him was that of confusing causal sequences with logical sequences. When an effect is constantly preceded by its appropriate cause, one can of course predict with some security that the same effect will follow in the future. But that is not what Hegel intended. Each stage of consciousness, like each stage of history, was the manifestation of an idea, incorporated that idea, "stood for" that idea, and it was the implication of the idea in question that he was anxious to explicate. The whole course of development from beginning to end could then be thought of as a complicated logical system, as if one had before one the whole of Euclid from the axioms, definitions, and postulates to the last possible lemma. In that case the temporal factors of proceeding step by step from theorem to theorem would be of no importance and one could call the whole flat system by some name, like the history of the artistic-idea, or the history of the political-idea, or what not. This being so, every man in the history of philosophy or every artist in the history of art or every nation in the history of nations would be turned into a symbol of an abstraction out of which the logical necessity of later ideas could be drawn.

Thus in the *Phenomenology* we begin with bare consciousness which gives rise to self-consciousness. Bare consciousness is always consciousness of something, and that of which it is conscious is the particular being which is before it. It starts by being pure sensory awareness, probably of some color or sound or smell or other sensory datum, but it is always the apprehension of a particular. It does not have to be one kind of sensory datum rather than another, for what it is will depend upon circumstances. But the one feature which will be universally present will be the particularity of the experience, what Hegel calls the "this." We do not know what the "this" is; we merely are aware of its being there. We can say nothing more about it than that it is, for we have no ideas by means of which we can classify it, no knowledge of relations by means of which we situate it in a context, no feelings of liking or aversion by which we can accept it or reject it, no knowledge of values by which we can judge it. We do not know what it is, merely that it is. And similarly, as far as our own self-consciousness is concerned, in this stage we know simply that we are. What we are is still unknown. We are in the position of Descartes during the process of doubting and before he has resolved his doubt. Though we phrase our consciousness in terms of a particular *this,* we have as yet no knowledge of the distinction between particulars and universals. The moment we attempt to raise our vague consciousness to the level at which it can be given some meaning, that is, to name it or describe it, we inevitably are forced into the proclamation of a universal—in this case, Being. The term "Being" describes nothing in particular, for all possible objects of consciousness at least "are," even if we do not know what they are. The same will be true of the subject which is conscious. Nevertheless we have at least discovered a distinction between subject and object, knower and the known, a distinction which is a polarity. Moreover, by reflection we learn that the object as object exists only for a subject and that the subject as subject exists only in so far as it has an object. The meaning of the two polar terms is reciprocally determined and one limits the meaning of the other. Hegel is utilizing here the ancient principle, "All determination is negation," a principle which we have already seen elsewhere. No predicate can have any definite meaning unless it selects out of a possible collection of beings one group. If the universe as a whole is to be divided into two classes of beings, then those two classes will have contradictory attributes. This is the technique lying behind Hegel's argument through all his works which deal with the dialectical process.

That every assertion "implies," as Hegel would say, a denial, is supposed to be so not only in the sphere of logic but also in that of experience. The moment of time which is before one, the Now, is present only because other moments have gone by and others are to come. Similarly the region of space which is before one, the Here, is here only because other regions are elsewhere. Otherwise the present would be everlasting and the spatial Here would be everywhere. As soon as we know anything whatsoever, however vague and apparently indeterminate, we use the principle of determination through negation. Consequently when we attempt to articulate the experience of what we are conscious of in sensation, we invoke universals which are the very opposite of particular existences. One could of course remain inarticulate, staring stupidly before the material of the senses, knowing nothing. But the problem is to see what happens when we actually know something.

When knowledge arises and we perceive, rather than merely sense, things, when we are able to judge what is before us, then we apply to the experience certain general terms which classify or categorize the contents of consciousness. To say that what is before us is a tree or a house is to group it with other beings which share its properties. The objects of which we are aware no longer exist simply in themselves, externally to all thinking, but for us, as things which we handle, so to speak, and judge. If there were no knowing subjects there might be an utterly unknown world of beings but, since they would be unknown, nothing could be said about them. Every predicate which is asserted of them is asserted by a mind, and the universals which those predicates name are the possessions of a mind. The illusions and errors of perceptions are discovered to be such by a mind. Everything which can be asserted of the object turns out to be a universal applied by the mind. The belief that what is before us is a particular therefore has to be corrected, since it is a particular nothing until it has become a particular example of something. That something is the universal which characterizes it. We do not see an apple; we judge that whatever it is that is before us is an apple. The judgment, which consists in applying a universal to the sensory datum, in this way gives meaning to the bare datum and in Hegel's words both negates it and conserves it. Its lack of meaning, its emptiness is negated; yet it is conserved as a specimen of something universal. This activity of the mind is called an "elevation" (*aufhebung*). When something is *aufgehoben,* it both loses and gains, loses its degree of imperfection or incompleteness and gains a kind of fulfillment. The history of consciousness in the *Phenomenology* is the story of how this process moves on. No progress is possible, according to Hegel, unless the past or the lower stages are superseded, but in the supersession of the past something is also retained. Perception then, as distinguished from bare sensation, is (1) a collection of universals, existing side by side, the properties of the thing perceived; (2) the exclusion from the thing of those universals which we judge not to belong to it—negation; (3) the fusion of the collection into a unity and the exclusion of all other properties which together give meaning to the thing itself. In the case of our apple we have first, roundness, redness, sweetness, and so on lying side by side as separate properties; second, all the properties which are excluded by roundness, redness, and so on; third, the union in our minds of these two sets of properties which alone differentiates the apple from everything else in the world and makes it an apple. We do not have to be conscious of all the second set of properties to know that what we have before us is an apple; but were we to know fully what an apple is, we should also have to know what it is not. Full and complete knowledge is never possessed by any human being, for by a simple argument one could be convinced that to possess it would mean to know all possible and actual beings.

The technique of Hegel now appears to be that of reflecting upon the implications of an abstract term and clarifying them. He asks himself what could be the meaning of a term in isolation from all other terms and discovers that meanings arise always in contexts. Analysis and synthesis are recognized not only as "opposites," but also as necessary ingredients of any attempt at understanding. To analyze is to presuppose a whole—a synthesis—already given, and to synthesize is to presuppose elements. But nothing can be a whole which does not have parts, and there can be no parts which do not belong to wholes. The distinction is one made for purposes of clarification in discourse. The parts and wholes are reciprocally interdependent and it is easy to see that if this is applicable to all terms whatsoever, and Hegel believes it is, then one cannot stop this side of the totality of beings which is the universe. The universe, as in Schelling, is itself a complete unity in which all parts are interrelated and the interrelations consist of logical bonds, not material or teleological. That is, first, the unity of Hegel's Absolute, or whole, is not the stuff out of which it is made, which broken up into atoms or monads or corpuscles manifests causal interrelations, in the sense that a stone dropped from the Eiffel Tower will have its reverberations in Sirius; nor is it, second, that all the parts conspire to further some purpose, the greatest good of the greatest number, or the glory of God, or the beauty of a cosmic work of art. One must begin by at least naming what is before one or what one is reflecting about, and then one will see that anything said about it which is true will be true only because an infinite number of other assertions are true. Since all terms and assertions are functions of minds, it ought to be possible to begin with the simplest and most incontrovertible of them all and imagine what kind of consciousness would indulge merely in asserting it. The *Phenomenology* thus takes on a dramatic quality in which the evolution of the mind is described as a logical process, and as a process oriented toward greater and greater self-enlightenment. As the book develops, the dramatic quality gains the upper hand, and in such chapters as that on mastery and servility or that on the unhappy consciousness we see not only his extraordinary powers of logical analysis but also his psychological insight.[1]

When one takes the states of mind illustrated and analyzed in the *Phenomenology* and labels them with abstract nonpsychological terms, one has his *Logic*. The *Logic* proceeds according to the same technique of trying to discover what is entailed in the assertion of any general term. The most general of such terms is *Being;* but *Being* must be contrasted with something if it is to have meaning, and that something is its contradictory, *Non-Being*. But the logical passage from *Being* to *Non-Being* is a process of reasoning and requires a name of its own, *Becoming*. That which is in a state of becoming is both ceasing to be what it was and on its way to becoming what it will be. But nothing just *is;* it has to be of such and such a sort, to have certain essential traits which make it what it is. These essential traits are its *essence*. But again an essence is as it is because of certain rational processes going on in a mind which determines them. Whatever category we choose to situate an essence in, for instance that of causality, has to combine the objective characters of the being which we are studying and the purpose for which we are studying it. Out of that combination arises a new idea, which Hegel calls the *Notion*. This process of deriving new ideas by noting that which delimits and thus determines them and by combining both contradictories in a "higher" idea is called the dialectical process.[2] But if the process is seen both in logic and in the evolution of the individual's spirit, then the distinction between logic and what might be called history disappears. The historical works of Hegel are an application of this discovery to the history of philosophy, of civilization as a whole, and of art. It is not to be wondered that history for him was the attainment on the part of human beings of the total Idea which to his way of thinking was the reality within the flux of time and change. The Idea too was a synthesis of opposites, for it was timeless in that its pattern never changed; temporal in that it was manifested to us only in time. It was spiritual in that it was discovered only through the operations of the spirit both in introspection and self-analysis; it was over-individual—objective—in that it could be found in groups of minds as well as in the individual mind. It could even be called an extension of Kant's Transcendental Unity of Apperception, since it determined the categories according to which we are bound to think and to express our total natures.

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[1] Unfortunately there is no English translation of the *Phenomenology* which is adequate to the German text and to the needs of the nontechnical reader. The Scribner volume of extracts, edited by J. Loewenberg, contains a chapter on the Contrite Consciousness translated by Royce which is a good sample of the whole but only a sample. J. B. Baillie's completed translation in two volumes is almost as difficult as the German.

[2] In the jargon of the schools, the stages are Thesis, Antithesis, and Synthesis.

The essential features of the Hegelian system seem to be the following: (1) the theory of internal relations. This is the theory that all determinate things are what they are because of the relations which they sustain to other things. These relations are of various types and are symbolized by the prepositions and verbs which we habitually use to make up our sentences. When we say that someone is the son of someone else, we are relating him to others; and, if our sentence means anything, it points to some character in the person described which would be different if he were not the son of certain individuals. But those persons, too, are fathers and mothers of this particular person; they also would be different if their child were not as he is. It is true that they are historically prior to their children, but it is also true that they are not parents until they have a child. The moment that happens it becomes impossible to say whether the child is determined by the parents or the parents by the child. The three form a new unit which has a character all its own and determined by the relations subsisting between its terms.

(2) The exclusive reality of the whole. As soon as one considers a family group, one sees that it is not entirely determined by its inner relations. For as a group it has economic relations to other groups. Let us assume that the father is a wage-earner. It is not only his welfare which depends upon the economic system in which he operates, but that of his wife and children. Whether the business in which he works is small or large, the demand for its products, to take but one determinant of its success, is going to have an important effect on the condition of the families which depend on it for their living. The education, the health, the amusement, to mention only a few items, are far from being independent of the welfare of the father's economic interests. And we have seen in recent years that the race of the employer, his religion, his political views may influence his success, to say nothing of the relation of the nation as a whole to other nations. If Swiss watches suffer from a duty so high that they cannot be profitably imported into other countries, then the man who works for a manufacturer of watches in Switzerland will soon be out of work, and if he is out of work who would dare predict in detail the consequences for his wife and children? The economic system becomes a vast network in which an individual is but a trivial unit. On the other hand, a family is involved in a vast political network equally determinative of a family's welfare.

The obvious example occurs in case of a war. If we assume that wars are not exclusively caused by economic rivalries, we can see that a state of war may ruin a nation's welfare in all respects, just as it may stimulate industry in certain cases. The first World War started the industrialization of outlying communities, such as Australia, which could no longer depend on the mother country for supplies. This may well have weakened the industrial health of the mother country. The principle of internal relations is thus not simply a logical principle applicable to the meaning of terms but can be extended, as Hegel did extend it, to the whole.

(3) The relative unreality of parts and the absolute reality of the whole. One of Hegel's most influential statements is that only the whole is real, only the whole is true. Since there was no fundamental division between existence and logic in his mind, the real and the true were fused. If no part of a system is real in isolation from the system, then no sentence can be entirely true in isolation from the logical system of which it forms a part. A geometrical theorem is true only because of the preceding theorems, the axioms, definitions, and postulates from which it is ultimately deduced. It might also, though this seems to me more doubtful, be thought of as true only in relation to its implications. If the whole is the entire system of all possible theorems, then only the entire system could be properly termed true. And since there is supposed to be a system of real things and events corresponding to the logical system, then only that whole system could be called real. One sees a curious illustration of this in some of the names given to the chemical elements that were isolated in the early days of modern chemistry, such as oxygen, hydrogen, nitrogen. They derived their names from what they were believed to generate. Or as Hegel would have said, their meaning depends on their relations to their effects.

(4) The correspondence between history and logical order. We have already seen this illustrated in our brief discussion of the *Phenomenology*. But Hegel's philosophy of history, which is constructed according to that pattern, implied that every future state of a series of events could be logically predicted. A period of history is as it is because it stands for a stage in dialectical evolution. Each stage of history is self-destroying in proportion to the degree in which it is self-asserting. Just as the master needs slaves in order to become masterly, and the slave masters in order to remain slavish, so capital needs labor and labor needs capital and the warfare between them will eventuate in another order in which both will be superseded, if Hegel's theory of history is right. In the history of religion Greek polytheism was a necessary result of what he thought of as Oriental

pantheism. If God is everything in general, He is nothing in particular, and divinity is saved only by personalizing it. But by the stubborn insistence on personalization, antiquity reached a stage in which every individual thing became deified—trees with their hamadryads, waves with their nereids, fountains with their nymphs, rivers with their river-gods. Varro's lists of the thousands of gods and demigods in the Roman pantheon is a case in point. What emerged was the Christian conception of a God Who was both a person and all-embracing at the same time. Similarly, what Hegel believed to be Oriental despotism gave way to Greek democracy which together turned into European constitutional monarchy. Such details can best be found in Hegel's own works. We cite them here simply as illustrations of the method when rigorously applied. The importance of it was the predictability of history.

(5) Each period of history is dominated by a "spirit" or state of mind which gives the period its name. Thus all history can be called spiritual history; it is really the history of the manifestations of the *Geist*. Why the *Geist*, which as a whole is nontemporal, should manifest itself in historical moments is answered by the obvious fact that historians are human beings who live in time. None of them can see the whole *Geist* and none can see more than what their immediate state of mind permits them to see. To see the whole *Geist* one must have studied the dialectical method, and then by applying it and carrying it out to its logical conclusion one will be able to envision the totality of things.

The followers of Hegel split into two schools, usually referred to as right wing and left wing Hegelians. The former emphasized the idealistic side of their master, the latter the objective side. We shall now proceed to give samples of each with no attempt to exhaust the subject. Hegelianism had so many followers, each somewhat differentiated from the others, that a complete account of the matter would demand a large volume. We begin with right wing Hegelianism.

2. Right Wing Hegelianism, Windelband, Green, Bradley, Croce, and Gentile

Right wing or idealistic Hegelianism spread widely through Europe during the latter half of the nineteenth century. It retained the doctrine of internal relations and therefore the interconnectedness of the universe, emphasized the "spiritual" nature of all being, and tended to neglect the rigid formulas of the dialectical process. When the right wing Hegelians discussed ethical matters they dwelt upon self-realization as the end of human existence, and they meant by "realization" the fulfillment of an individual's potentialities, his dependence upon the Absolute, and the impossibility of his completing his destiny in isolation from the total community of souls. The kind of monism which was erected upon this basis was the monism of structure rather than that of substance; the cosmos was a whole in the sense that an organism might be considered a whole, and the delight which these Hegelians found in the contemplation of organic unity amounted at times to enthusiasm.

We cannot go into the details of this tradition, which at present is moribund, but shall have to content ourselves with selecting a few representative figures. These men will at least illustrate the popularity of the movement, even though they do not exemplify how it spread step by step. Our account of them makes no pretense of being complete.

In Germany the Hegelian influence was perhaps strongest in the field of cultural and intellectual history. Windelband (1848–1915), for instance, though he differed widely from Hegel in his epistemology, in his value theory reflects much that was Hegelian. For his idea of the determination of the individual's duty by the general will, which is an expression of the universal will, is clearly another version of Hegel's idea that goodness is itself an approach to the total life of the universal spirit. His history of philosophy, with its organization of men into schools arranged according to the dialectical method, materialists versus idealists, empiricists versus rationalists, has been the most influential history of that subject written in modern times. It is in fact the most learned book of its type, and its treatment of philosophic problems, though often artificial, has proved enlightening to three generations of philosophers. There is scarcely a textbook on the subject today which does not reflect—indeed copy—Windelband's schematism. If cultural history became so important to his juniors, men like Dilthey and Rickert, it is probably because of his prestige, for his general position was such that it convinced scholars of the predominant importance of a total cultural epoch in setting up problems to be solved and in orienting minds toward the solutions which they gave to the problems.

In England Hegelianism was introduced by J. H. Stirling's *The Secret of Hegel* (1865). But it was T. H. Green (1836–82) who became the real founder of the school. His *Prolegomena to Ethics* (1883), which ran through several editions, takes as its starting point the principle of the interconnectedness of bits of knowledge, a principle which he attributes to Kant and interprets according to Hegel. It is true that Kant had insisted upon the relations which unite sensory data into little or big wholes and had given the understanding the power of relating things. But he had never maintained, as far as I know, that a single sentence could not be true in isolation from all others. To Green the active force of the knowing subject bound the world into a systematic whole, and it is only because the subject itself is a unity that it sees nature as a unit. There lies behind this the old Platonistic thesis that a physical world, if isolated from mind, would be a mass of unrelated items, that relations cannot be "real." But Green also insists that if each individual mind did its own relating, there would be nothing more to nature than a similar mass of unrelated universes. Kant saved the unity of nature through the transcendental unity of apperception; Green, through thinking of individual minds as mirrors of the divine mind. It is the latter which creates a unified cosmos and we simply reflect its activity in our own thinking. But since we are moral, as well as cognitive beings, we rise above the natural order as moral wills rise above the world of bare fact. By the venerable principle that value cannot be founded on fact, Green posits a moral will which lives in the world of value and which again reflects the will of the divine mind. And once again, as in the German Neo-Hegelians, the divine will can be known only through its manifestation in history.

More biting in his criticism of the prevailing British temper than Green was F. H. Bradley (1846–1924), whose *Appearance and Reality* (1891) became a classic almost overnight. One of the great English stylists, Bradley's dialectic almost destroyed itself. For if the meaning of a term or sentence can be determined only by a knowledge of all other terms and sentences, then clearly no man will be able to know much beyond the most general principles. Thus there could be no relations whatsoever, since there would have to be a relation to relate the relation to its terms, another to relate that relation to the second relation and so on ad infinitum. Thus if we say *John is the father of Joseph,* then Bradley maintains, there must be a second relation relating John to fatherhood, fatherhood to Joseph; a third relating that relation to both John and whatever the relation might be called, and so on. It is clear that he has thought of relations as if they were terms, perhaps—strange as this may seem—because he was misled by the verbal symbols involved, which symbols are in themselves separate terms. Aside from this bizarre error, Bradley does insist on some points which should never be neglected. One of the most important is that all propositions begin by being judgments. They are made by human beings and are made about whatever it is which we directly experience. But the moment we make a judgment about a datum of experience, we have to pass beyond it, if only in classifying it, relating it, qualifying it. This is really Hegel's point that the immediately given is ineffable, says nothing in itself. To make it say something, we have to assert something of it and, though we know by reflection that it is more than what we say about it, for we cannot exhaust its character in any finite set of statements, we inevitably contradict ourselves if we think we have caught it in any cognitive formula. For Bradley, to judge is to identify. If we say, "This is an apple," and then try to judge what an apple is, we have to string out an infinite series of assertions about what an apple is, and he seems to believe that the word "is" means "is identical with," or "is nothing more than." That the word "is" is ambiguous, and in one sense simply means "has the quality of," should by the middle of the twentieth century have become obvious. But even if we recognize the ambiguity and assign this second meaning to the verb, every predicate involves a universal, and unless we are dealing in tautologies we do indeed go beyond the immediately given when we make descriptive judgments.

This seems to Bradley to involve us in contradiction. And to him the one outstanding truth is that ultimate reality must be self-consistent. To be consistent or inconsistent is a property of assertions, not of things, and things can be consistent only when they are identified with the propositions which describe them. Not to identify them and to reassert a duality of thought and things would have seemed monstrous to Bradley, for he was assuming that knowledge was the unique subject-matter of discourse. Since knowledge is always expressed in judgments, one could never transcend the judgments except by exploring their "implications." The outcome of Bradley's most famous book is that there are certain very general truths in which we may rationally believe. They are: (1) the logical consistency of the real; (2) the fusion of appearance with reality in spite of the recalcitrancy of appearance to rational expression; (3) harmonious unity of the whole where "harmonious" means the consistency of qualities; (4) the exclusive reality of the psychical existence, not the psychical existence of the individual subject, to be sure, but of the Absolute. This result, though it is reached by steps which are not those of Hegel, is nevertheless Hegelian in its general outlines.

The philosophy of Hegel entered into Italy through the writings of Augusto Vera (1813–85), whose role was similar to that of Stirling in England, and Spaventa (1817–83). But the tradition was given new life in the works of Benedetto Croce (1866–1952) whose book, *Saggio sullo Hegel* (1913), translated under the title *What is Living and What is Dead in the Philosophy of Hegel,* rejected the dialectical process completely and envisioned the life of the spirit as an autonomous activity expressing itself in four different ways. In spite of his abhorrence of abstract logic and tight classifications, Croce did set up a new classification whose inner frontiers seemed as tight as those which he was attempting to overthrow. Thus in cognition we find two kinds of knowledge—that of concrete individuals known by intuition, the immediately apprehended, ineffable, qualitative; and that of abstract universals, mediated, articulate, quantitative, known by the intellect. Both together make up the spirit's theoretical life, intuition expressing itself in art, intellect in logic or science. But since we can say nothing whatsoever without intellect, and the intellect can say nothing whatsoever without the stuff of immediate experience, the two forms of activity are interdependent. This harks back at least to Kant's famous statement that concepts without percepts are empty, percepts without concepts blind. Contrasting with man's theoretical life is his practical life. Here too there must be a practice which is concerned with particular ends, which he calls economics, and one concerned with universal ends, which he calls morality. And just as intuition and intellect cannot be thought of separately, so economics and morality too are separated only for purposes of discussion. Man's economic activity is oriented toward his personal and individual needs, but these acquire significance only in their relation to universal ends. His moral activity is oriented toward universal ends, but individual problems and needs give them substance. Moreover, both theory and practice are similarly entwined, for what is theory if it cannot be justified by practice and how can practice attain its ends without knowledge of theory? A theory which cannot be carried out is empty logomachy; practice which cannot be absorbed into a theoretical system is aimless. Hence, ultimately, spiritual activity never is broken up into parts but all its aspects have an intimate relationship to one another. It is an outburst of lyrical expression codified by us for our intellectual needs, and the codification must not be taken too seriously.

Croce's main contributions to philosophy lay in the field of aesthetics and the philosophy of history. His aesthetics abandoned the traditional notion of the *genres,* comedy, tragedy, lyric, epic, and so on, for since he believed that art, in his language, is always the "expression of an impression," every work of art is perforce an individual expression and its aesthetic importance is not to be measured in terms of its approximation to class-properties. The artist intuits an experience, absorbs it into his spiritual life in all its individuality, and gives it forth impregnated with his own personality. To classify works of art and criticize them on the basis of their conformity to an overindividual standard is to treat them as if they were the subject-matter of science. True criticism consists in a man's reliving the artist's own experience, which comes down to expressing one's intuition of the work of art as if it were a fresh and new experience. Artistry then is the creation of a spiritual world. The historian is also an artist, since he must also relive the experience of others. History is the antithesis also of science, since the events which are expressed by the historian are also individual and concrete, not general and abstract. When Croce says that history is the story of freedom, he means above all that the historian is as free as the artist to express what he intuits. This, however, does not imply that he must not be faithful to the facts. His freedom consists in his interpretation of those facts. But since the spirit as it courses along through time is self-determinative, there is also freedom within that whose history is being written. There will always be conflict, as in Hegel, but history may as well be the story of the overcoming of conflict as of succumbing to it. In the long run, history has to be the history of spiritual activity, not of economic effects or political intrigue. It is "thick" history, rather than thin, for the spirit is not selective in what it does. It functions as a unit.

There was very little of Hegel left when Croce got through with him. But even that little was rejected by his colleague Giovanni Gentile. For Gentile's conception of pure activity involved a complete abandonment of any schematization or classification. His impatience with Croce's fourfold arrangement of human activity was at times expressed with such violence that it lost all point. To him the main fact about the world was its being in a state of constant recreation by the spirit, but as common sense still had vestiges of power over his thinking, he could not believe that each individual recreated the world from moment to moment. Consequently, it is the universal spirit which does this work and which is now thought of as subject, now as object. By an irony of dialectic which Hegel would have enjoyed, this amounts to nothing more—except verbally—than the naive idea that there are two worlds, an objective and a subjective, material and mental. Whether one calls the two by a single name, *lo spirito* or *attò puro* or matter or mind or something else, until one has shown that the general laws descriptive of the behavior of one can with equal relevance be applied to both, one has not unified them. If the objective world is the spirit, then the laws of the spirit must be applicable to it. No philosopher to date has been able to show that billiard balls behave even as amoebae behave, to say nothing of the poetic imagination. The terminal versions of Hegelianism in Italy were a denial of difference by fiat. The old pluralities reasserted themselves in different forms.

But it should be admitted on the other hand that Croce and Gentile by pointing to the nonrational—or nonscientific—factors in the world and by insisting on the temporal dimension made it easier for their successors to accept these things as real and not in need of being explained away. The acceptance of time and all that is involved in it was one of the major revolutions in contemporary thought.

3. Left Wing Hegelianism, Feuerbach, Marx and Engels, and Stalin

If right wing Hegelianism is moribund, its antithesis is very much alive. In all probability the only other philosophical theory which has had as much vogue and power is Scholasticism. For left wing Hegelianism, or, as it is called nowadays, dialectical materialism, is the official philosophy of Communist governments everywhere, much as Thomism is the official philosophy of most Catholic schools and universities. Dialectical materialism is Hegelian in its adoption of the dialectical technique and materialistic in its denial of nonmaterial beings. Its source is said to lie in the work of the German philosopher L. A. Feuerbach (1804–1872), though the bond between him and Marx is none too obvious. Feuerbach was more interested in writing attacks upon traditional theology than in developing either a philosophy of history or a program of social reform. His emphasis upon restoring the human body to a place in the sun after the long series of anti-materialistic polemics was one reason why he had a certain popularity with Marx and Engels, and it is also likely that his view of religion as a rationalization of human life was not without importance. For he recognized that life proceeds in a variety of ways and that each had its religious expression.

Engels himself located Feuerbach between Hegel and himself and Marx when he came to write his monograph on Feuerbach.[3] Since it is important to know just what the authors of what later became dialectical materialism thought they owed to Feuerbach, we shall examine briefly Engel's own statement of the matter. It was Feuerbach's *Essence of Christianity* which provided the solution of the difficulties in which the young left wing Hegelians found themselves when confronted by a philosophy which seemed to justify the Prussian state. The solution was radical enough: it consisted in the reaffirmation of the independence of nature from all philosophies. In ordinary language this meant that there was a world existing independently of thought as the subject-matter of thought. All philosophy then became the interactions between this world and the human mind. It would have been no more than eighteenth-century epistemological dualism if Feuerbach had accepted the so-called "empiricisms" of the eighteenth century. But knowledge to him was not a simple copy of the external world, nor was it an effect made upon the mind by moving particles of matter, nor was it partly one —the ideas of primary qualities—and partly the other, the secondary. It was essentially, as it had been in Hegel, a manipulation of experience in terms of the dialectical process. This kind of knowledge, according to Engels, is best illustrated in experimentation and industry (*op. cit.,* 60). If an idea can be substantiated by experimentation, then there must be a world independent of our experiments whose nature is revealed in them. For sometimes experiments go wrong. It is we who frame the hypotheses which we wish to test; but the success or failure of the test is determined by something over which we have no control. Feuerbach's materialism was a recognition of this. It is not our idea of matter which is in conflict with the idea which we are trying to prove. In that case—and this was the situation in Hegel—contradiction between the two ideas would be sufficient proof of falsity. But Hegel was not worried by that result since he believed that only the whole was true anyway. To Engels, a statement can be true in isolation from the whole, but nevertheless, since it acquires its meaning from the total context in which it arises, it is always tentatively true and will require correction as the context changes. That context is always historical. As Feuerbach had recognized the influence of the historical epoch, of the way in which people lived, or at least their religious beliefs, Marx and Engels had only to make more precise what was meant by the way of life. Their definition included such things as the successes of natural science and industry. Knowledge as a whole, not merely what Marx scornfully called ideologies but practical knowledge as well, had to be considered in any epistemology.

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[3] See Fr. Engels, *Feuerbach, the Roots of the Socialist Philosophy,* trans. by Austin Lewis, Chicago (1903), Author's Preface, p. 34.

Hegel had emphasized, as we know by now, the purely ideal forms of knowledge, the abstract ideas which symbolized stages in the dialectical movement, so that Engels was able to say that to Hegel the absolute idea existed before the world and the logical categories came into being before the universe. This is a misstatement of the Hegelian position, since the priority of which Hegel was speaking was logical not historical priority. The emphasis upon the ideal formulas of history came from the *Logic,* not from the *Phenomenology.* The latter showed how the abstractions could be drawn out of states of consciousness which were also ways of living. One could indeed develop Hegel's philosophy of history out of this book as well as out of the *Logic* and, if one did, then Hegel would become closer to Marx and Engels than they themselves realized. In any event it is true that for Feuerbach Hegel believed the natural world to be a projection of the mind. His own position is the reverse. His famous sentence, "Man is what he eats," was another way of saying what Cabanis had said, "The brain secretes thought as the liver secretes bile." But all such thoughts can be reduced to the assertion that man's total nature is determined by the material conditions under which he lives. Feuerbach himself protested against too narrow an interpretation of his materialism when he said it was not the materialism of the physiologists; it was not simple mechanicalism, if that word is intelligible. Such a materialism, it was maintained by Engels (*ibid.,* 66), could not represent the universe as a process; motion to its ways of thinking "turned always in a circle." In other words, the materialism of the eighteenth century could conceive of change as nothing more than displacement. In such a system no genuine novelty could appear and history would be a series of repeatable incidents, like a string of beads on a chain. No one influenced by Hegelian historical works could accept that any longer. Too much moreover had been done by writers like Vico, Herder, and Condorcet to permit men to believe that history is simply repetition. Geology, embryology, the physiology of plants and animals, and inorganic chemistry had been developed to such a point that no intelligent man was willing to believe that change was simply appearance and not reality. Irreversible change, change in which unpredictable qualitative novelty was to appear, had to be accepted, and if it posed a problem, so much the worse.

To Engel's way of thinking, science has changed essentially since the eighteenth century. Science, he maintains (*ibid.,* 99), in the previous century had been a collecting of things known, whereas contemporary science had become the science of changes, of origins and processes, and of those interconnections between things which bind natural changes "into one great whole." This has come about through three great discoveries: the discovery of the cell and its development; the metamorphoses of energy—mechanical, electrical, chemical, and so on—which give us a picture of nature as a perpetual process of transformation; and finally Darwinian evolution, which proceeds without the intervention of nonmaterial agents. That nature herself is dynamic or in a state of evolution is a clue to the historical processes of human affairs, law, history, religion. But whereas those philosophers who had a glimpse of this idea had seen the goal of general evolution as the attainment of their own particular ideals, the modern philosopher is enabled to find through observation and the discoveries of science the actual goal. Yet Engels does not assume that there is no difference whatsoever between man and matter. Society is not the result of "unconscious blind agents" (*ibid.,* 103) interacting; on the contrary, consciousness itself is one of the agents, and human purposes and plans are necessary if society is to change at all. There is nevertheless a general law which determines what purposes and plans will be realized. We can form our own ends, but we cannot foresee their results. The interplay of individual purposes determines those results and, giving Engels the benefit of the doubt, the very complexity of these purposes makes it impossible for any individual to prophesy with accuracy what they will be. This is analogous to the situation in which a great variety of causes are at work which as a group behave in an orderly fashion, so that one can predict the general results of their collisions. The law of large numbers may be at work here. We can with a small margin of error predict the number of births and deaths in a given population, but we cannot predict which individuals will have children and which will die in the period under consideration.[4] I am not at all sure that this is what Engel means, for he makes no appeal to statistical reasoning nor does he believe in chance. The dialectical process will always be exemplified in history, but nevertheless individual volition and passion will play their part. There is no inconsistency in maintaining that large numbers manifest a regularity which small numbers do not manifest, nor in maintaining that in small groups of events we can discover causes of change more easily than in large groups. A physician can predict—given the proper information—what an individual patient will die of and even when he will die. No statistician would venture to predict now how many deaths will occur in 1980 from leukemia. If, however, he had reason to believe that diseases increased and decreased as a whole at a certain rate, the prediction might be valid regardless of what individuals did to ward off a given disease.

The great law which applied to human social history was, of course, the Marxian principle of the class-struggle. "One would have to close his eyes," says Engels (*ibid.,* 109), not to see that the fight between the landed aristocracy, the middle class, and the proletariat is "the moving force of modern history." Economic interests, whether one is conscious of them or not, determine the major historical changes. The very differentiation of classes is a result of changes in methods of production. Economic interests and methods of production are the primary factors in the "new materialism," and yet Engels insists that they do not automatically change, but rather change through the efforts of the people concerned. Class-interests and the methods of production may thus form a Hegelian conflict out of which may arise a new mode of production and a new dominant class. A class becomes conscious through suffering from injustice, and rebellion against injustice may simply be the need felt of satisfying hunger. Since the state is always identified with the interests of the dominant class and protects those interests through statute, it is usually necessary to change the conditions in which the suppressed classes labor through overt revolution. Revolution thus becomes the negating of a condition and will bring about its supersession. Just as law is always framed to protect the interests of the dominant class, so are philosophy and religion. They may appear to be completely detached from material concerns, but in reality they are apologetics for the satisfaction of those concerns.

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[4] Cf. Pearl's curve of the increase of population.

Feuerbach's relation to the Marxian philosophy is thus attenuated. His materialism was not that of Marx and Engel. As Marx said in Brussels in 1845,[5] Feuerbach still thought of reality as the object, whereas he thinks of it as action, *praxis.* Feuerbach, he continued, did see the material foundations of religion, but he did not see why those foundations were transmuted into their very opposite, "established in the clouds." The problem of Marx and Engels was to bring it down from the clouds to earth. And this they did by their theory of thought as action, a theory which with different emphasis was to be formulated by the American philosopher, C. S. Peirce, and developed into the various types of pragmatism. If thought is action, then its objects must never be envisioned as static objects but rather as processes. Processes, as Engels says in his *Anti-Duehring*[6] (p. 28) and repeats constantly elsewhere, are not bound either to exist or not exist; they flow from being into non-being, are in a state of becoming. Hence the hard and fast concepts, modeled on static *things,* do not fit them. Dialectics, "which grasps things and their images, ideas, essentially in their sequence, their movement, their birth and death" (*op. cit.,* 29), alone can handle them adequately. If the whole cosmos is seen as a process, then clearly the laws of transformation are more important than simple descriptions of the things which are being transformed. One might put this thesis as a denial of Aristotelian logic with its basic assumption of eternal entities which do not change in their nature. We must, he pleads (*ibid.*, 51), abandon the notion of a world which is a static unity. We must furthermore ask what purpose static unities serve, and then the answer will integrate even metaphysical thoughts into ways of acting. One cannot unify things which do not as yet exist; hence any system based on unity must be based on things as they are. Action controlled by such ends is frozen as of the moment of systematization. From this it follows that ideas as used in traditional philosophy are dead plans of action and the religious and other complexes of ideas are similarly dead. When Marx says that "the religious world is but the reflex of the real world," [7] he means, as his discussion of the matter will show, that since all social systems are determined essentially by the methods of production and these are in constant interplay with plans of action, religious ideas too must serve some purpose and that their purpose will be the preservation of the *status quo.* As soon as men thoroughly understand their relations to one another and to nature, the religious reflex will disappear, for it can no longer serve any useful purpose. Presumably that moment will arrive when all the world is communist.

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[5] Printed as an appendix to Engels on Feuerbach, *op. cit.,* p. 129.

[6] I use the translation of Emile Burns in the Marxist Library, N.Y., n.d.

It is strange that neither Marx nor Engels ever saw, to the best of my knowledge, that plans, whether for action or not, can be based only on the information which one has at hand or be simple lyrical outbursts. For Schopenhauer, too, ideas were instruments, but in his case they might move in any direction as long as they satisfied the will to live. But to Schopenhauer the individual was different from a social atom, and thoughts might arise in a man's mind which were not a reflection of the interests of either the dominant social class or the class with which an individual identified himself. If a given social class can survive only by perpetuating the material conditions upon which its survival is dependent, those conditions must be formulated—assuming that plans are needed—in terms of what exists here and now. But if history is in a constant process of change, then those ideas too will become obsolete and no change will be possible. Hence Marx and his *alter ego* were pushed into accepting a law of change which would include changes in ideas and thoughts, and it had by the nature of the theory to be one over which men had no control. This is as good as saying overtly that thinking really "makes no difference" except at a given moment.[8] Yet even in Engels' *Dialectic of Nature,* a work left uncompleted at his death and printed only in 1927,[9] Engels again insists that human history differs from animal history precisely because consciousness enters into it and thoughts guide it to some extent. To what extent is never, as far as I have been able to discover, made clear. Thus we find (*op. cit.*, 19) that there is a colossal disproportion between the proposed aims and the results at which we have arrived, that "unforeseen effects predominate," and that "uncontrolled forces are far more powerful than those set into motion according to plan." This is no doubt true as an empirical fact, but if the economic system were in fundamental control of history, why should it be true? And if it is not in fundamental control of history, what means have we for discovering the amount of control which it has? Engels' answer in this place—which he might have revised had he published the work himself—is that "the most essential historical activity of men," production, is subject to the interplay of unintended effects from uncontrolled forces. That again is no doubt true, but it is no explanation of the problem before us. The plans may be obsolete and the results unsatisfactory. But any plans whatsoever must be made at some date, and a simple factor like a great increase in population or a disaster, such as a flood or drought, might make any plan, however intelligent, futile. "Only conscious organization of social production," says Engels, can save us. But if the stages of history occur according to a general dialectical law, the way we think and plan must occur according to the same law, and when Engels is writing the history of science he agrees. We shall see that even Stalin, who had some experience with social planning, repeated the same formulas.

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[7] *Capital,* trans. by Moore and Aveling, N.Y. (Modern Library ed.), n.d., p. 91.

[8] The clearest exposition of the Marxian theory of intelligence which I have found is that of Sidney Hook in his *Towards the Understanding of Karl Marx.*

When Engels comes to dialectic itself, he revives the Hegelian scheme in the following fashion. To him the laws of dialectics are abstracted from the history of nature and that of human society. They are three in number: (1) the transformation of quantity into quality and *vice versa;* (2) the law of the interpenetration of opposites; (3) the law of the negation of the negation. In Hegel these were laws of thinking; in Engels they are laws of nature. Quantity turns into quality since any qualitative change occurs because of changes in energy. Thus a cold body becomes warm as its molecules move faster. Quality becomes quantity when one body loses energy in the form of heat to another which may move or break up chemically or the like. Strictly speaking, this is not quality becoming quantity, or the reverse; it is simply an illustration of how the two are inseparable. It is doubtful whether anyone today would deny that one cannot change an object's qualities without operating upon its material substance through energetic transformations. But this law apparently was not obvious in the middle of the nineteenth century, for Marx too in *Capital* (*ed. cit.,* 338) makes much of it, his example being the amount of money which turns a man into a capitalist. The third law is exemplified as basic types of society change their nature and turn into their opposites. Thus primitive communism turned into the slave-system, which turned into the feudal system, out of which came capitalism which will in turn give rise to socialism. The progressive negation of previous stages is seen when a stage is considered as exemplifying a system of production, the owner of the tools of production and the controller of the laborer being the signs by which one system is differentiated from another.

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[9] An English translation by Clemens Butt, with preface and notes by J. B. S. Haldane, appeared in 1940, N.Y., International Publishers. I quote from this edition.

Since the philosophy of Marx and Engels is the philosophy of a large part of the population of the world today, though it is more than doubtful whether it is actually applied in the countries where it is official dogma, we shall conclude this section with a word on an interesting pamphlet by Stalin called *Dialectical and Historical Materialism.*[10] Stalin described the dialectical method as consisting of the following features. (1) Nature is "a connected and integral whole, in which things, phenomena, are organically connected with, dependent on, and determined by each other" (*op. cit.,* 7).

(2) Nature is in a "state of continuous movement and change, of continuous renewal and development, where something is always arising and developing, and something always disintegrating and dying away."

(3) Quantitative changes lead to qualitative changes, and the change occurs "as a leap from one state to another," not accidentally, but as the result of "imperceptible and gradual quantitative changes" (*ibid.,* 8).

(4) Internal contradictions are inherent in all things and, quoting Lenin, "Development is the 'struggle' of opposites." (*ibid.,* 11)

Applying Principle 1, no system can be appraised on the basis of abstract justice; all must be appraised by their place as determined by historical development. Slavery would be senseless in modern times but is an advance on primitive communism. By Principle 2, there can be no immutable right or wrong and one must always approve of that which is coming to birth and disapprove of that which is dying. This is called looking forward. Principle 3 justifies revolution rather than reform. And Principle 4 justifies the class-struggle. It would be folly to scrutinize this reasoning very closely, for the work was not written for philosophers and, moreover, I am working from a translation, not from the original Russian. Nevertheless it is difficult to see how anyone during a certain period could tell what its place was in an historical series of periods. One can here as elsewhere be wise after the event, and if one knows ahead of time what the economic system is, one can predict the future by negating the present. Unfortunately for the prophets, the present is often so heterogeneous that it is impossible to do more than guess at its "nature." On Marxian principles alone, could anyone have predicted the switch from capitalism to fascism in Italy and Germany and Spain, no two of which had the same economic system before the switch except in the most general terms. Indeed, there is a closer resemblance between the Soviet government and Fascist Spain at present than there is between the modes of production in the two countries, the working classes having just about as much political power in one as in the other. When such similarities are brought up, the reply usually is that the difference lies in the motives of the governors, one working for the interests of the proletariat, the other for their own interests. But interests are not economic systems, nor could the same political systems be reflections of different economic systems. This is not, however, the place to argue such matters.

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[10] Published by the International Publishers as Volume XXV of the "Little Lenin Library." It is extracted from the *History of the Communist Party of the Soviet Union.*

Not only is this not the place to quarrel with the views which we are expounding, but it is the place to present them as clearly as possible, for when a philosophy dominates the thoughts of several nations and over half the civilized world, it would be stupid not to understand it as thoroughly as possible. Whatever one may think of economic determinism, to omit the economic factor as one of the most important determinants of the course of history is inexcusable. The various stages of economic development are oversimplified by Stalin as they were by his teachers; there were never pure primitive communistic societies, pure slave-societies, pure feudal societies, and so on, and when the Marxian is talking evolution, he is careful to note the inner conflicts in every epoch. His systems are as much abstractions as the periods of Hegel or Spengler or Herder or Vico. One can plausibly argue that if they were pure, such and such results should have followed, much as a physicist can argue that the law of falling bodies or Boyle's law will be corroborated under laboratory conditions. But history does not take place under laboratory conditions. In a similar manner the classic theory of the economic man and the classic formulation of the law of supply and demand were discovered to be inapplicable in a strict sense since they were based upon abstractions out of the real world and no method existed for allowing for contrary forces. When, for instance, supply is deliberately kept down in order to keep prices up or demand artificially stimulated by appealing to snobbery, then psychological factors have to be taken into account when one is discussing prices. As a matter of fact, Marx's *Capital* is full of expressions of moral indignation, and one suspects that it had more to do with the success of Marxianism than the empirical content of Marxian writings. Social movements, like the rise of Christianity, of Protestantism, of present day Communism, may be interpreted after they have succeeded as the reflection of ideals as well as of economic systems, for, as the Marxians admit, the economic systems are always expressed as ideas.

In closing this too brief account of Hegel and his influence, it is amusing to note how it illustrates a dialectical evolution. Hegel could with reason be called an idealist; the Marxians call themselves materialists. The outcome of Hegel's political philosophy was an apology for the Prussian state; the outcome of Marxianism is the very reverse. For Hegel, thought was self-development; for the Marxians, it is conditioned by the economic system. Yet the primitive ideas of Hegel were taken over bodily by Marx.

CHAPTER 18

Philosophies of History

One of the effects of the French Revolution on philosophy was to turn men's thoughts again to history. We have suggested how this new interest developed in Hegel; we have now to investigate its appearance in France itself. In doing so we shall first discuss two of the main philosophical trends: that of the so-called Traditionalists and Positivism.

1. Bonald and Maistre

Traditionalists, Count Joseph de Maistre and the Vicomte de Bonald, who were as closely united as Marx and Engels, were apologists for Catholicism and indeed in their political philosophy maintained that the Pope had supremacy over all the rulers of the earth.[1] For Bonald, men are not simply social atoms living in conglomerate masses, nor do they form societies because of a social contract; they are social by a law of nature. Individuals are whatever they are because of the character of the society in which they live. Just as Hegel was able to speak of Oriental, Classical, and Germanic societies as having each a spirit of its own, so Bonald was able to speak of Jewish, Pagan, and Christian societies as "expressions" of pure theocracy, pure humanism, and the proper balance between the two. But whereas the third stage of social evolution in Hegel was an improvement on its preceding stages, in Bonald this is far from being the case. The Jews and Pagans strayed from the ideal which had been revealed by God to their primordial ancestors and, consequently, a Christian society is one which has regained the original and eternal pattern of right living. Thus history represents the divergencies and approaches of societies from God's will and to it. Change is real enough but it is always bad. The only good society is the eternal society, and if we have moved away from it, that must be because of our inherent wickedness.

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[1] For a fuller account of this movement, with documentation impossible to reproduce here, see my *French Philosophies of the Romantic Period,* ch. iii.

Just as the personality of an individual is determined by the society in which he lives, so our ideas are realized only in that social thought which is language. We have seen something like this before in Reid and Jouffroy. But in Bonald the social nature of ideas carries the implication that the individual who resists the common opinion of the group is a pig-headed rebel who deserves punishment. For the tradition which is language, i.e., thought, is by its very nature true, and the rebel is a rebel not merely against a government but against truth. Just as religious tradition is a growth from the first Revelation to Adam, passed on to subsequent generations through Abraham, Aaron, and the high priests of Israel to the Apostles and from them to the Popes, so language is a steady growth of ideas originating in a source which was implanted in Adam's mind by God. Since language and thought are identical, and since all history is a growth from a seed to maturity, and since everything which is in the plant was potentially in the seed, all truth was given to Adam, and tradition is simply the unfolding of that primitive truth. Traditionalism could perhaps be called a theory according to which history is exfoliation.

The main difference between Bonald and Maistre lies in what the one or the other omitted from his writings, not in what they included. They both took up their pens primarily to justify their hatred of revolution, for they both thought that the cause of man's downfall was itself revolution. The disobedience of our primordial parents was the first rebellious act of human history, and each succeeding rebellion has brought about disastrous consequences. Both men agree also that change is inevitably a movement from better to worse, for whatever order is established, it is order. In that it resembles the original condition of man before the Fall and, presumably, stability is the greatest social value. Stability is described as an image of eternity, as correct an image as can be found on earth. Prophets and saints have the power of emerging from the temporal sequence into timelessness, and the realm of timelessness is the realm of absolute values and authority. Oddly enough, both men confuse the idea of the eternal with that of the everlasting or long-enduring, so that any institution which lasts for unusually long periods is considered by them to be superhuman. The Church, which had lasted for eighteen centuries, must for that reason alone be considered divine. The Capetian dynasty again has lasted longer than any other known to man; it too must be under divine auspices.

Just as Maistre hates change, so he hates diversity. The temporal and the many, the timeless and the one go hand in hand. All tendencies toward plurality are inherently evil; all the contraries inherently good. But the kind of unity which he longed for was the unity of a hierarchy, the sort of thing which had as one of its earliest expressions the various books of Pseudo-Dionysius. The Middle Ages, on the whole, had accepted the hierarchies of Plotinus as pervasive of the universe, and that mirror of the cosmic hierarchy which was the theoretical feudal system, running from Emperor down to serf, retained in the eyes of even the more sophisticated philosophers the prestige of the celestial hierarchy. Thus, rank was not merely one's place in a larger whole, as it might have been for the Stoics, but conferred on a person a certain degree of value. A baron was supposed to be nobler than a yeoman, not in that he had command over more people, but because his place in the system was nobler. So positions in the universe had varying degrees of value, the periphery being inherently better than the center, a notion reflected in Dante's circles of Hell. It was the social and political hierarchy that Maistre was anxious to preserve. In the Old Régime all power was theoretically in one pair of hands; in the Church it is in the hands of Christ's Vicar, the Pope. The unity of power in the Church is contrasted by Maistre with the diversity of power in Protestant sects according to which, he believes, every individual has authority equal to that of every other individual. Maistre's passion for unity is so strong that in his book *Du Pape,* he goes to the extreme of insisting that all secular rulers are subordinate to the head of the ecclesiastical organization. The Pope is called "the natural chief, the most powerful promoter, the great Demiurge of universal civilisation" (*Du Pape,* Bk. III, ch. ii). No Guelph was ever more strident in his claims of sacerdotal supremacy.

The philosophy of history of which these two men were the chief proponents gained few followers in the early nineteenth century, and it was not until after the Vatican Council (1870) and the formation of *l'Action Française* that their influence began to spread widely. The development of their principal ideas is to be found in men like Ballanche and LaMennais where it led, unfortunately, to error if not heresy. But we cannot describe its evolution here. Suffice it to say that in LaMennais traditionalism turned into philosophic anarchism. But this was about as inevitable as anything in the history of ideas can very well be. For if reality is behind the historical scene, then what takes place on the stage must be purely phenomenal and, as Kant and his followers had shown, one of the things that take place is rational thought. If, then, we are to obey commands given by a supernatural source, we must not ask for reasons why; obedience is enough and is all that is asked of us. But a system of government in which there is no rational code of law is hardly a system. Caprice however disguised becomes law and submission the highest virtue. The inner conflict in the set of ideas known as traditionalism lies in the presupposition that truth is one and yet develops in tradition. How this can happen has never been satisfactorily explained nor is it likely to be, since development by its very nature entails change.

A philosophy of history such as this, moreover, does not explain why men should sin and thus stray from the ideal set before them by their Maker. Sin becomes as mysterious as righteousness, so that both the eternal and the temporal are veiled in obscurity. There is, to be sure, no reason why a philosophy of history should deal with historical causation and thus be able to predict the future. It may maintain that what men do as social animals is utterly undetermined and that the course of history is chaotic. But whether that be true or not, Traditionalism itself is unable to make any predictions, though Joseph de Maistre himself was not reluctant to make them. It may conclude that human beings, in the words of St. Augustine, are incapable of not sinning and that consequently the future will be as disheartening as the past. Yet one might venture the suggestion that if one is to have a philosophy of history, one should first assume that the historical process is real and should not be explained away.

2. AUGUSTE COMTE

A less anti-intellectual philosophy of history was developed by Auguste Comte and his followers. As early as 1750 Turgot had maintained, in a speech printed in 1808, that men first think in terms of divine wills effectuating all change in the cosmos. The gods were simply human beings blown up to superhuman size, and presumably primitive man thought of all change on the model of changes produced through human effort. Later, says Turgot, philosophers recognized the absurdity of the aetiological myths and "thought to explain the causes of phenomena by abstract expressions, such as *essences* and *faculties,*" expressions which had no explanatory value whatsoever but were in reality names for our ignorance. After this period, "while observing the mechanical action which bodies have one upon the other," new hypotheses were elaborated which "mathematics could develop and experiment verify." [2] The essential points in this passage from Turgot's speech are (1) that it outlines the course of intellectual history, the way in which men think; (2) it recognizes three stages: the theological, the philosophical, and the scientific; (3) it identifies the first with explanation in terms of volitional action, the second with explanation in terms of verbal abstractions, the third with explanation in terms of empirical observation capable of mathematical formulation. The only hint of an explanation of why modes of thinking should change is in the passage from mythology to philosophical abstractions, where Turgot says that the philosophers recognized the absurdity of the myths. But why people brought up on myths and mythological explanations as correct and standard should ever see them as absurd is left in the dark.

That empirical observational science is the only kind of knowledge which is reliable is emphasized by d'Alembert in the Preliminary Discourse of the *Encyclopédie.* Moreover, it is pointed out that the arts and sciences have a reciprocal influence upon each other; that the useful arts, agriculture and medicine, developed first and that the first science to develop was physics, because of its utility. That an art may develop before the principles which its practice illustrates was a relatively novel idea, and one of the reasons why Diderot and d'Alembert included so many articles on the crafts was that they believed technology to be of equal value with science. Science may thus be considered to evolve out of practice. One gradually learns how to do or make something; one finally becomes conscious of the rules which one has been unconsciously following.

A third idea which was to reappear in Comte was that the intellectual history of the individual recapitulates that of the race. This notion is clearly expressed in Condorcet's *Esquisse* and, in Comte's own words, man is a theologian in his childhood, metaphysician in his youth, and positivist in his manhood. The inevitability of thought passing through these three stages was formulated as a law by Comte and he considered it to be the fundamental principle of his philosophy.[3] Since he had no special admiration for children, it framed not merely the course of intellectual evolution but also the passage from bad to better thinking. Thinking in the third stage was the goal of all thinking. Such thinking was called positivistic by Comte. It was the logical organization of observations, and all observations were supposed to be neutral as far as the observer's interests or other preoccupations were concerned. In short, they were identical with Hume's perceptions, except that in Hume there was a lingering feeling that the perceptions masked inner natures which were not observable. Comte maintained flatly that there were no inner natures. What is observed alone exists. It is too bad that he did not raise the question of what conditions the observations, for it should be obvious that they are never made *in vacuo*. The contribution of the problem, of the method, of the instruments used, of the laboratory conditions, and the like, is surely not to be overlooked in a discussion of observation. But Comte was so convinced that neutral observations could be acquired that he even deprecated the use of microscopes. To him the scientific method was essentially the collecting of what the nineteenth century was likely to call the facts; facts were apparently lying about waiting for people to collect them, like seashells on a beach. It was only later in the century that men like Poincaré began to question this idea.

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[2] The complete passage in English may be found in my *French Philosophies of the Romantic Period,* p. 265. The speech as a whole is available in the *Oeuvres de Turgot,* ed. by Eugène Daire, 1844, Vol. II, p. 656.

[3] Evidence of the anticipations of this "law" is given in my *French Philosophies of the Romantic Period.*

Metaphysics, as we have said, is one type of thinking and a type which became obsolete at the close of the Middle Ages. Included in metaphysics was psychology which in the early years of the nineteenth century was still the "science of the soul." Since souls were not observable to the sense-organs, they had to be ruled out of the possible subjects for scientific inquiry. Yet Comte assumed a metaphysics of his own according to which a distinction was made between active and passive senses; a hierarchy of sensation from touch, the most universal, to hearing, the least; and a sort of methodological behaviorism. He insisted upon the disunity of the Ego and the social origin of self-consciousness. Though he rejected the legitimacy of the idea of causation, he did insist upon that of legality. All such notions are based upon a metaphysics, or could be justified only as assumptions tentatively held in order to see whither they might lead one.

But more important than his metaphysics is his idea that all history is intellectual history. The Law of the Three Stages runs throughout his work. One of its supposed implications is that each subject-matter has a history of its own and reaches the positivistic condition at a date peculiar to itself. Thus all science is approaching the condition of mathematics, but a science like astronomy is closer to that goal than physics or chemistry or biology. One can therefore classify the sciences on the principle of where they stand in relation to the general history of thought. Since a completed positive science would be absolutely general and contain no causal residues, it is clear that mathematics is the most perfect science attainable by man. For there is no subject-matter whatsoever which is not describable in mathematical terms. Thus mathematics becomes both the perfect science and the tool by which sciences are to be perfected. Comte's famous classification of the sciences—mathematics, astronomy, physics, chemistry, biology, sociology—is not only an arrangement of subject-matters from the most inclusive to the least, from the most abstract to the most concrete, but it is also a history of science. The various sciences listed could be said to have arisen in the order given, though the determination of the dates of origin is far from simple. Just when shall we say that physics arose? Was there not some biological information in primitive medicine? Can one not speak of even culinary recipes as rudimentary chemistry? But if one is willing to be lenient, the order is reasonable enough, and it is also plausible that the formulation of scientific theorems is always preceded by a long history of practical devices. Thus we have early Egyptian representations of souls being weighed in balances long before Archimedes, to say nothing of Lavoisier. And though alchemical theory was largely mythology, its practice was often fruitful. In any event there is plenty of evidence to back up Comte's generalization that practice is prior to theory. Primitive practice always operates, as indeed it must, through human volition. One *produces* one's effects, as if the will were somehow competent to change the order of nature. If, then, one thinks that all change comes about in a uniform fashion, one must find a method of influencing the wills that are nonhuman and which may be either beneficent or maleficent. But the only way to influence a will is through threats, promises, and the like. But this is essentially magic and the man who knows the magical recipes will have the most important knowledge of his people. Such a man is the *shaman* or priest. He has the monopoly of the methods by means of which he can control the natural world. His tendency is, of course, to retain that monopoly for himself and his group. But similarly, since all change is produced by wills, government itself must be conducted by a will and that will belongs to the most powerful man in the community, a king. Thus monarchy, the priesthood, magic, belong together on the theological stage of human history and determine a kind of society which is characteristic of the childhood of the race. But Comte is willing to admit that remnants of the childish manner of thinking survive in individuals who live in later stages. So that no later stage of thinking is ever pure.

The metaphysical stage also determines the general character of a society. Where everything is expressed in terms of essences or abstractions, only those individuals who can handle them can exercise power. Such men are logicians and jurists, for the essences are always incorporated into legal formulas. Sovereignty itself is abstracted from the person of the king and erected into an essence of its own, popular sovereignty. The theory of popular sovereignty is metaphysical in the sense that the people are in reality a collection of individuals whose wills are often in a state of conflict. To determine the popular will is always to use a fiction, majority rule, or something of that sort. This may be a useful device but cannot be thought of as a real expression of an overindividual will. Certain individuals will obtain power, as they did in the theological period, by understanding the rule in accordance with which the people are governed. In Comte's day, as Daumier saw so clearly, these individuals were the lawyers who were supplanting the military class as the dominant power in society. But he was living at the end of the metaphysical period, he thought, and saw signs of the approaching third stage, the positive. The positive mind would of course stop at perceptual appearances and attempt to order them in constant laws. But these laws would be laws, not of hidden metaphysical essences, but of empirical observations. Scientists alone could possess the necessary knowledge to understand that kind of world, and the scientist and technological expert would take the place of priests and jurists. Utilizing their knowledge, as kings utilized that of the priests, would be the industrialists who would become the real rulers of society through their experts' advice. Comte foresaw a time when the map of Europe would be redrawn so that the location of raw materials, rather than mountain ranges and rivers, would determine frontiers. His dream was a world at peace through economic interdependence. If all the iron on a continent were in one place and belonged to one nation, and if all the coal belonged to another, then the inhabitants of Ironland would have to live at peace with those of Coal-land. The experts would presumably inform the industrialists, who would in turn influence the statutory rulers, that it would be better, in some sense of that term, to agree to interchange the materials essential to prosperity than to make war and to seize them. But one may ask whether the older sentiments of national pride would not arise again in the hearts of the Ironlanders and induce them to feel humiliated if they had to bargain and negotiate for that which their ancestors had acquired by military valor.

This picture of the future was a rationalized account of what history would be if history followed the Law of the Three Stages. Out of the progress of the sciences was to arise the new science of sociology. Sociology, as Comte saw it, considered the individual simply as a constituent part of a society, and he never paid much attention to the strains and conflicts within all social groups, not to speak of the individuals themselves. To him humanity was logically prior to human beings. The latter he saw simply as specimens of the former. Though he was willing to admit a certain degree of heterogeneity in his admission of survivals of older methods of thinking into later periods, he failed to see the psychological effect of those survivals on the total human being. If one thinks theologically about the stellar universe, metaphysically about, let us say, poetry, and positivistically about chemistry, one will sooner or later attempt to iron out these inconsistencies or try to justify them. It is of course possible that one will do nothing whatsoever and live according to different sets of rules. But to Comte's way of thinking that was inconceivable. To him there was always a tendency toward a unification of intellectual processes. If in the theological age there are priests and kings, that is because theological thinking demands them. Comte was dominated by the idea of "unity," an idea which he never analyzed very thoroughly but which he used continually. Thus his admiration for the Middle Ages was based entirely on the unity of culture which it manifested, "the political masterpiece of human wisdom."[4] Concretely, this unity was the supposed pervasiveness of Catholicism in all spheres of human interest. As is customary with admirers of this period, Comte paid no attention to the constant quarrels between various religious groups, the rise of heresies and the manner of exterminating them, the disputes between philosophic schools, to say nothing of the wars between feudal chieftains. The most that one can say of medieval unity is that it should have been the dream of the Church.

The basic question which one must ask in reading Comte's philosophy of history is whether the technique of thinking is the clue to historical change. The discovery of the fact that this technique itself has a history, though Comte's account of it may be incorrect, is of the greatest importance. For if it is a fact, then the results of thinking must always be appraised relative to the technique by which they were found. The notion of absolute and enduring truth would have to be disregarded unless one had reason to believe that a given type of thinking was final and not merely the latest. Both Comte and Hegel did think that they had such reason and that therefore their philosophies were final. In both these men the later

[4] *Cours de Philosophie Positive,* 54th chapter, ed. Schleicher, 1908, Vol. V, p. 173.

stages arise out of the earlier through reflection; that is, the mind itself sees that it must proceed beyond the point at which it has arrived. The obligation is, however, differently grounded in each of them. If, on the other hand, the anti-intellectualists were right and thinking itself is a reflection of something nonintellectual, then that something, the will-to-live, the will-to-power, social utility, the interests of the dominant economic class, personal happiness, will have to be examined to see why it changes as the years go by. Either there is no explanation of any historical change or there are a variety of basically different causes of such change or there is one general cause. Each of these positions has certain definite implications for a philosophy of history. In Comte's case there was one cause of change, methods of thinking. But those methods themselves have a history. It is curious that Comte did not see the possibility of his third stage becoming superseded as its predecessors were.

3. Cournot

A philosophy of history similar to Comte's in certain details is that of A. A. Cournot (1801–77). Though his great work, *Considerations on the Progress of Ideas and Events in Modern Times* (1872), never had the popular success that Comte's work enjoyed and though even today he is very little known, there are certain germinal ideas in the *Considerations* which have played an important role in recent years.

I refer especially to the doctrine that chance has its part to play in history as well as determinism, accompanied by the doctrine that the history of human societies is intimately linked with the history of all natural processes. It is the latter doctrine which led him to call his point of view "historical naturalism." It is naturalistic in that it accepts the results and methods of science as ultimately true and not simply as descriptions of the phenomenal world. It is historical in that the sciences, arts and industry, which obviously have a history, are an integral part of the natural order. Cournot himself stated the difference between his own philosophy of history and that of others as follows (*op. cit.,* p. xxvii). Whether there are historical laws or not, there are historical facts; and he proposes to examine the interrelations of these facts, which are here independent of one another, there interdependent. In that it studies the facts and their interrelations, it will probably never reach the status of a science which for Cournot must demonstrate laws. Laws are supposed to be always true and to follow from the very nature of that of which they are the laws. But facts are events determined by other events and determining still others. One can discover why an individual behaves as he does; but one cannot have a scientific study of an individual. It is clear that for Cournot, who was a mathematician, deductive science was the model of all science. Deductive science therefore is not causal, and Cournot makes a sharp contrast between implications and causal determinism. History is a causal study, not a series of deductions.

It is interesting to observe that Cournot opens his *Considerations* with a definition of "chance." He points out that chance is not a name for our ignorance, nor a covering of the imperfect state of our knowledge, but a fact of nature, established by reasoning or by observation like any other natural fact. It consists in the mutual independence of several series of causes and effects which collaborate accidentally in producing a certain phenomenon, happening, or event, called for this reason fortuitous. But none of this means that all the links in the chains of events are not suspended from a primordial ring, the will of God. Thus if one puts several dice in a shaker, the sum of the figures which turn up is a fortuitous event; it is not determined by the original position of the dice in the shaker, nor by the shaking which is given to the shaker, nor by the hand which held the shaker. What turns up could not have turned up unless the dice had been in the shaker and shaken. In other words, that preliminary situation is a necessary but not a sufficient cause of the final result. So one can say that a man cannot die without having had parents; but his parents are hardly the cause of his death. In the aetiology of any individual event one must have recourse to chance, since such events by their very individuality extend beyond the boundaries of any class in which they may be located. Cournot does not deny that historical events can be classified; but he insists that each has characteristics which are not those of every other member of the various classes in which someone classifies them. Every war is like all wars, but the explanation of the War of 1812 does not have to be identical with that of the Spanish-American War. When an historian writes about the latter, he does not do so in terms of the former. Briefly, though Cournot does not use these words, one can call an individual, dated, and localized event either self-determined or accidental. The two terms mean the same thing.

At the same time, statistics show us that there is regularity in the universe and even large groups of accidental events will manifest a regular character. This is well known to every Freshman. But what does not seem to be so well known is that there is nothing inconsistent between the existence of chance and that of law, nor of chance and that of causality. The number of events that had to meet when Abraham Lincoln was shot by Wilkes Booth surpasses the imagination. It was pure accident that the murder came off, as we know. And yet the cause of Lincoln's death is far from being unknown. Scientifically all we can say is that Lincoln died because his heart stopped beating. Historically we say that he died because he was shot by Booth. History, then, is the aetiology of events and for that reason must include chance in its considerations. It will of course indicate general tendencies when the historian perceives them, but it will never overlook the effects of chance occurrences. History then must rely on the interplay between chance and law. If everyone were like everyone else, if everything were like everything else, then there might be change, but there would be no explaining it. For causal explanation is relevant only to the appearance of differences. In fields like the history of science, where human caprice counts for so much less than in the history of political institutions, the factor of chance is less important. And, Cournot thinks (*ibid.,* 7), the time may well come when human beings will be so standardized that history will become obsolete. At that time, one imagines, rational sociology will have taken its place.

The reality of chance makes "historical Molinism" (*ibid.,* 11) absurd. The existence of scientific law does not eliminate either the individual's freedom nor his responsibility. Law is true only of large numbers of facts, never of the individual fact, and the contribution of the individual thing to the events in which it participates—the language is mine, not Cournot's—does not disappear when a law is established. The behavior of the individual is whatever it is regardless of general statements descriptive of large masses of individuals more or less like him. This important bit of wisdom on Cournot's part has been overlooked by his successors as well as by most of his contemporaries, who find a conflict between the idea that a man may be responsible for his acts even though large groups of men, as groups, act in a regular and fairly predictable manner. As long as one makes a distinction between causality and law, and the distinction seems necessary, there will be an intelligible sense to the words freedom and responsibility. But when one asks Cournot whether there is a general law upon which we may base hopes for a better future or despair, he cautiously points out that we simply do not have enough evidence for either. He is equally cautious when it comes to accepting such grand ideas of history as those of Hegel and his school. The facts show, he insists (*ibid.,* 15), a constant interplay between chance and regularity, and the greater part of his two-volume work is given up to pointing this out.

We are too limited in space to do more than hint at what follows in Cournot's book, but a hint at least is necessary. He is only too willing to admit that there are in human history, as in geological, certain events which take time and which we call epochs or ages. These have marked beginnings and develop in a detectable manner. In what we call the modern period, beginning with the fifteenth century, we cannot help noticing a growth of science and industry which was more rapid than one finds in the earlier period, the Middle Ages. It is the predominant interests of a period which give it distinction and a name; these interests may be completely satisfied or not, may therefore come to an end. Their satisfaction will demand certain things, as industries of a given type demand special raw materials, energy to manufacture them, and so on. Should all the iron in the world be exhausted, industry based on steel would have to be abandoned and a substitute for steel would have to be found. It is in that sense of the word that a civilization can be said to decay, though this must not be taken as evidence that Cournot presupposes an entirely material basis for all civilizations. He is arguing against a notion of a period as a sort of living being which is born, matures, and dies. He is willing to use that figure of speech but points out that it is only a figure of speech.

4. Spengler

Though the metaphor of the life-cycle was but a metaphor in the eyes of Cournot, it continued to be used and in two of our most popular philosophers of history, Spengler and Toynbee, it became central. Oswald Spengler (1880–1936) in his *Decline of the West* was one of the most celebrated prophets of doom in the period between the two wars. To his way of thinking history was the spectacle of ever-recurring cycles analogous to the lives of individuals. One of his essential distinctions was that between cultures and civilizations. A culture "springs with primitive strength from the soil of a mother-region." It clings to that soil throughout its life. Each culture has "its own idea, its own passions, its own life, will, and feeling, its own death" (*op. cit.,* Bk. I, 21). Cultures may be of two kinds, Faustian and Apollinian. The former resembles Nietzsche's Dionysiac will, the latter his Apollinian. But the examples given by Spengler in his typically suggestive rather than explicit manner are as follows. The nude statue, mechanical statics, the sensuous cult of the Olympian gods, the individualistic city-states of Greece, "the doom of Oedipus and the phallus cult," are all Apollinian and all presumably differentiae of a culture. The art of the fugue, Galilean dynamics, Christian dogmatics, the Baroque dynasties, "the destiny of Lear and the Madonna-ideal from Dante's Beatrice to the last line of Faust II," are all Faustian. Apollinian painting defines the body by contours; Faustian forms space by light and dark.[5] The Apollinian culture conceives of history as determined outwardly, Faustian inwardly. The soul of classical culture was Apollinian, of post-classical western culture, Faustian. We might not be doing an injustice to Spengler to say that the Faustian is passionate, dynamic, expressive; the Apollinian rational, stable, and reflective. But one never knows in dealing with this type of philosophy whether one is just to it or not.

As cultures mature they pass into civilizations. A civilization is the last stage of a cultural cycle. It is the stage of completion in which a pattern is fixed. As a man growing old repeats the acts of his maturity, neither seeks nor acquires new ideas, substitutes ritual for invention, and lives by the inertia of custom, so a senile culture continues meaninglessly to repeat the things which originally were creative and expressive. One cannot deny that communities do reach that stage when they are faced with no new problems—witness the old New England villages become summer resorts—and indeed it is hard to see how a group of people clinging to its mother-region could do more than maintain the design of the past in the present. When faced with a challenge, people can either meet it or submit to it and die. But to maintain that inevitably a people will die has little if any evidence to support it.

The weakness of Spengler's philosophy of history is common to all men who insist on seeking a uniform spirit of a people or an age or a culture. The delimitations of historical events must be made laterally as well as longitudinally. The frontiers of a nation may be defined in geographical terms clearly enough, though they too have changed significantly, but when one is speaking, for instance, of the French, does one include the people of the northern provinces whose dialects pass by almost imperceptible steps into Flemish on the West and German on the East; does one include the Gascons whose ancestors came from what is now Spain and whose dialect is close to Spanish; does one include the Provençaux and the Dauphinois? If one is considering the plastic arts, would one ever know that the Rhineland was not deeply gallicized? And when one comes to religion, how is one to distinguish its Catholicism from that of any other country? Is the French literature of Canada French or Canadian? And what does one do about modern architecture between, let us say, 1850 and 1930, when architects in both the old and new worlds studied at the Beaux-Arts and followed the principles of Guadet? Each of these and other fields has to be considered separately and the lateral boundaries are never the same for any two except by accident.

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[5] Woelfflin's linear and *mahlerisch,* I suppose.

Spengler reads into the arts and sciences of the past the feelings they arouse in him, as if their makers had had him in mind. But we have no way of knowing whether a nude statue seemed to a Greek as Apollinian as it did to Spengler, even when it was a statue of Apollo. Could Archimedes have felt about the science of statics as the sculptor of the Apollo Belvedere did? We have no evidence whatsoever for opinions on what the Greeks felt about their most celebrated works of art with the exception of adjectives of praise, like "wonderful," "lifelike," and so on. In order to set up his cultures as homogeneous, he has to neglect all conflicting trends and, though he would be willing to admit that no culture after a few generations is pure, he does not see the contribution of conflict to the general picture. Ironically enough, his interpretations of the past have actually changed our view of the past. The Baroque, as in Lewis Mumford, has now become Spengler's Baroque and, whether we know it or not, we are likely to see it through his eyes. This has its benefits for it induces us to make new appraisals of periods and works of art which we had learned to appraise through the views of our teachers. But it would be absurd to say that it has led us closer to the truth.

Spengler's popularity has waned since the second World War largely, one suspects, because Mr. Toynbee's *Study of History,* Mr. Northrop's *Meeting of East and West,* and Mr. Sorokin's various studies have taken the place of the *Decline of the West.* All such books follow the pattern of simplifying civilizations and cultures, peoples and ages and movements, and giving them some name taken from individual psychology. No one has yet arrived to say firmly that a people is a collection of individuals in interaction with one another, loyal to various groups at the same time even when the groups have opposing programs, torn between selfish and altruistic motives, without over-all programs and purposes, now rebellious, now resigned, now led, now leading. What would seem to be needed is a return to analysis and the abandonment for the time being of major syntheses.

CHAPTER 19

Three Philosophies of Action

In a paper which has become a classic, published as long ago as 1908, Professor A. O. Lovejoy distinguished thirteen philosophic doctrines going by the name of pragmatism.[1] Some of these doctrines contradict others. Groups of inconsistent ideas were propounded by individual philosophers belonging to the movement, though, it need hardly be said, unconsciously, and few philosophers who called themselves pragmatists reformed because of the article in question. Mr. Lovejoy's well known flair for inconsistencies and ambiguities is not shared by the general run of philosophic pundits. And indeed one of the most noticeable characteristics of philosophy is how it is both a search for logical coherence and a skillful avoidance of it. We shall not strive, therefore, in this chapter to make our thinkers more consistent than they were, nor shall we attempt to give a section to every representative of a movement which rapidly spread throughout the Occident and, indeed, in one of its forms became the dominant mode of thinking in the United States. We shall have to be satisfied with selecting a few representative pragmatists: William James, John Dewey, and Josiah Royce. It may come with some surprise that Royce will be found in this group, but there are doctrinal similarities with some of the pragmatisms in his theory of ideas which I hope will justify the inclusion of his name here.

1. William James

Pragmatism was given a name by William James and was, as he says,[2] a doctrine of meaning first propounded by Charles Peirce in 1878. Since it was James's version of Peirce's theory which started the ball rolling, we shall deal with James. There are differences between his version of the doctrine and those of its founder; there are still greater differences between the inferences which James drew from it and those which Peirce drew. But these items of historical affiliation must wait for more detailed treatment than can be given them in a sketch of this type.

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[1] "The Thirteen Pragmatisms," *Journal of Philosophy, Psychology and Scientific Method,* Vol. V, pp. 5–12, 29–39.

[2] *Pragmatism,* 1907, p. 46. The doctrine was first announced in a lecture in Berkeley in 1898.

Beliefs, according to James's version of Peirce, are "really rules for action." The meaning of a belief—or idea—is the "conduct it is fitted to produce." We have here two different doctrines both of which need not be held by the same person. That the word "idea" has been used to mean a plan of action even in ordinary speech is indubitable. It is illustrated by the talk of a boy who says, "I've got a good idea—let's do so and so . . ." An inventor's idea of a possible machine, an artist's preliminary idea of a statue or picture or story, a scientist's idea of an experiment, would all be reasonable examples of this usage. But, unfortunately, even readers of this outline of a few modern philosophies will have recognized that a plan of action is not the only meaning of that elusive word and, in fact, any dictionary will provide plenty of others to confuse the issue. But once the pragmatist was committed to the doctrine that all ideas were rules for action, it was his duty to show that beliefs about the past, about remote regions of space, about other people's minds, about fictitious events, were all really prescriptions for doing something. It will be noticed that all plans for action by their very nature can be carried out only in the future. Consequently whatever a belief may sound like, it must be translatable into terms which can be illustrated only in future time.

The second tenet in this kind of pragmatism is that the meaning of a plan of action or idea or belief is itself the conduct it is fitted to produce. This again sounds simple enough. James cites a man looking for the right way home who discovers which one he should take by experimentation. The one which actually leads him home is the right one. Here again the futuristic element is essential to the theory. Before taking either path, the man cannot tell which one is right. He has two possible plans of action and at that moment it is incorrect to say that either is true or false. Yet common sense would say that whether the man has tried one of the paths or not, one is right and the other wrong. Similarly, common sense would say that the proposition, "Columbus discovered America in 1492," is either correct or incorrect whether anyone attempts to verify it or not. Again, we know that the sum of two finite numbers will be greater than either of the numbers without proving it by taking two or more numbers and seeing whether it is so or not.

This objection may not be as sound as it looks. An idea which has already been tested is true until it turns out to be false. One can always take a generally accepted idea and test it for oneself if one wishes. And the pragmatist would say that such ideas are dead plans of action. He is more interested in the man who is confronted by a problem which he wishes to solve. In that case he has to frame an hypothesis and the hypothesis will have to provide some means of verification. For an idea which precludes all means of verification is hardly worth consideration. This is the sort of hypothesis which James quotes the chemist Ostwald as suggesting (*op. cit.,* 49), of trying to determine whether a brownie or an elf causes dough to rise when mixed with yeast. To solve that problem one would first have to know how to distinguish between brownies and elves, then to state clearly how either could make the yeast operate, and finally how the intervention of the one could be distinguished from that of the other. But none of this is possible. Here, common sense would say that the problem is futile; pragmatism says that it is meaningless. And obviously if the meaning of an idea is the practical consequences of the plan of action which is equivalent to the idea, then a plan of action which has no practical consequences has no meaning.

Unfortunately there is as great difficulty in telling whether an idea is meaningless as in discovering its meaning. Unless we knew the meaning of the terms "brownie" and "elf" in Ostwald's example, we could not discover that sentences including them were pragmatically meaningless. The same situation is faced today by a group of philosophers called logical positivists who hold a similar doctrine of meaning. Thus Professor Carl Hempel in an article on *The Logical Analysis of Psychology*[3] points out that the existence or nonexistence of minds, feelings, inferiority complexes, and the like, is a pseudo-problem, since the only "legitimate use" of them is as abbreviations for physicalistic statements. The physicalistic statements are of course the description of the laboratory technique which would be used to determine whether or not someone has a mind or an inferiority complex or feelings. Until such psychological terms can be translated into physicalistic terms, they are meaningless. But again, how would one know what laboratory experiments to set up unless one previously had some idea or notion or belief or definition of something whose existence was to be tested by that technique? Let me give a simpler example of this problem. I am convinced that I had a father. I have good reason to believe that he died in 1898, too long ago for me to remember him. I know of no one alive today who ever saw him. Does the statement, "I had a father," mean the manner in which I would discover that I had a father? The reason why I believe it is that I believe all human beings have fathers and that I am a human being. That is a universal proposition the proof of which cannot be empirical. As a generalization it is, of course, inductive. But in my own little cosmos, it is an *a priori* certainty. It is only by my willingness to identify myself with other human beings that I can conclude to my having had a father, but that is not involved. As a matter of fact, even if my father were alive, there would be no certain way of discovering whether he was or was not my father. And yet no one would maintain that the meaning of the statement, "I had a father," is identical with the complex of statements describing the methods used to determine who that person was. One can believe that one had a father and yet have no idea who he was, and indeed there must be thousands of people in the world at any time in that situation.

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[3] First published in the *Revue de Synthèse* in 1935 and reprinted in English in *Readings in Philosophical Analysis,* ed. by Feigl and Sellars (1940), p. 373.

My belief that I had a father may influence my conduct in ways different from those which would ensue from the belief that I do not know who my father was. If I thought that I was an illegitimate child, I might be either depressed or elated at the idea. The depression need not be explained; the reasons for it are too obvious. The elation might easily come about when I should consider my escape from many of the troubles of an Oedipus complex, the need for supporting the man in his old age, my dependence upon him during childhood and youth, his possibly unpleasant character, and so on. I have presented two possible effects upon the conduct of a person who is illegitimate in the sense of not knowing who his father was. Does not-knowing-who-one's-father-was mean that one will be either depressed or elated by the discovery of one's ignorance? If so, it is a self-contradictory idea. Yet the statement, "I do not know who my father was," is formally correct and becomes self-contradictory only when its meaning is identified with its effect on the conduct of two or more people.

But that is precisely what is wanted of a theory of meaning: a theory which will give interpersonal meanings to terms and ideas, not private meanings. And this might have been one of the most important results of James's work if it had been thoroughly done. James had in mind the technique of the laboratory scientist, and it is undeniable that experimental science has proved more fruitful than purely dialectical science. Furthermore, one of the common meanings of "meaning" is the effect upon conduct of a plan of action. This appears when someone says, "If you do this or that, you know what it means." The consequences of virtue and vice, of passion, of loyalty, are often spoken of as their meaning. James was close enough to popular usage to appear convincing to many readers and, as appeared later when the works of the Viennese Circle became better known, to get rid of puzzles by saying that they were nonsense was a godsend. It meant, of course, the death of all speculative philosophy.

From the theory of meaning there followed a theory of truth. Since truth was an idea, its meaning must be defined by the consequences of holding it. Ideas, according to James, are not true; they become true. "Ideas," he says (*ibid.,* 58), "become true just in so far as they help us to get into satisfactory relation with other parts of our experience." Assuming that one knows what satisfactory relations are, this is a clear statement of the process of verification. It turns out that lying behind or underneath this theory is the belief that a great part of our beliefs form a system which, I suppose, is a logical system. The test of truth then becomes consistency with ideas already tested. But now what happens when one comes upon an idea which is radically new and contradicts the main principles in which one has believed to date? Until the development of rapid transportation, there was very little need to believe in a round earth. Few of us ever circumnavigated the globe, and a belief in a relatively flat earth would "get us into satisfactory relations with other parts of our experience." Why then do we accept the ideas of the geographers—who in the case of most of us are primary school teachers—and believe in a round earth? Part of our experience is the scholastic environment and it is indeed more satisfactory to agree with one's teachers than to disagree with them. But it is doubtful whether men who were propounding a thesis with which the majority of their fellows disagreed were thinking of satisfactoriness in terms of pleasant social relations. Such ideas as the commonplaces of science were to James "the dead heart of the living tree" (*ibid.,* 65) and these pejorative phrases were enough to turn him away from it. But unfortunately for those who like life, we cannot verify every idea for ourselves but must accept the overwhelming number of our ideas from others. They must have a kind of truth which is not consequences for the action of the individual. And of course James admitted that they did have this kind of truth. It resided in their consistency with the generally accepted body of knowledge. Our conduct, then, is limited in some way by this set of ideas.

Satisfaction in that case requires reinterpretation and James fell far short of providing it. When he came to certain metaphysical problems, such as the existence of God, he admitted that the debate between materialists and theists was "quite idle and insignificant" since matter and God mean exactly the same thing as far as the "actually experienced world" is concerned. To give the debate meaning, James turns to the unfinished world of the future, asks us to view the world prospectively rather than retrospectively. Materialism gives us a future without hope, and here James quotes Balfour's gloomy description of cosmic death. The theistic doctrine, "however inferior it may be in clearness to those mathematical notions so current in mechanical philosophy" (*ibid.*, 106), guarantees us an ideal order. We need an eternal moral order and therefore we have a right to believe in it. No one will fail to hear in this an echo of Kant's postulates of the practical reason. Here there is no longer any question of the meaning of God's existence as distinguished from that of His nonexistence. It is solely a question of what good it will do to believe in God. But what are we to believe in? If the meaning of an idea is its practical consequences, then the very word "God" means an eternal ideal order. But are the two phrases (1) "an eternal ideal order," and (2) "the existence of an eternal ideal order" identical? If so, then how could one distinguish between any idea which might be entertained and belief in the reality or exemplification of that idea? And if one can distinguish between an idea and belief in it, one has to set up two realms of being at least, one of which was traditionally called mental or subjective or ideal or something of that sort and the other real.

The logical positivist avoided that trap because he was much more precise than James was. The conditions for verification could be distinguished from that which was being verified; the rules which oriented verification could be distinguished as prescriptions from the terminus of verification; *a priori* principles and postulates of logical systems were not given truth in the same sense as statements expressive of fact were given. In short, the logical positivist was more careful in his analyses. Thus Feigl in his paper *Logical Empiricism*,[4] one of the clearest expressions of the whole discipline which I have come upon, points out among other things that there are both cognitive meanings in language and noncognitive. The former have to do exclusively with information and may be divided into the purely formal, the logico-arithmetical, and the factual or empirical. The noncognitive concern pictorial (imaginative), emotional or affective, and directive "meanings." Omitting the details of this discussion—for the paper is easily available—only formal and factual statements can be true or false, and the kind of truth which a factual statement has is not that which a formal statement has. Thus the truth of pure geometry can never be tested by experiment upon physical objects and the truth of an empirical statement will be determined by one's methods of induction. In this situation the theory of meaning is shown to be necessarily more complicated than James or Peirce saw it as being and, in fact, the "realms of being" about which statements seem to be made are multiplied rather than reduced in number. For once more, when the question arises of what a set of words means, we cannot see their significance or insignificance by staring at the words. We must in the last resort ask the person who expresses them what he intended them to mean. But in that event we are back where we started from, at the interrelations between intentions and facts. Otherwise we ought to conclude that only the language which we ourselves happen to be familiar with has any meaning.

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[4] Printed in *Twentieth Century Philosophy*, ed. by D. D. Runes, 1943 and reprinted as the Introduction to *Readings in Philosophical Analysis*.

2. JOHN DEWEY

As James recognized early in his career as a pragmatist, a theory similar to his own was being developed in Chicago by John Dewey (1859–1952), as it was in Oxford by F. C. S. Schiller. Since Dewey had more followers than Schiller and since his school still has many adherents, we shall confine our remarks to him.

All epistemologists must decide at the outset of their studies whether they will analyze knowledge after it has been acquired, "the dead heart of the living tree," or whether they will study the process of acquiring knowledge. Both James and Dewey chose the latter alternative and there will be no appreciative understanding of their theories unless one sees this. Dewey says, "Genuine intellectual integrity is found in experimental knowing. Until this lesson is fully learned, it is not safe to dissociate knowledge from experiment nor experiment from experience." [5] He is talking about how we learn, not what we know. He realizes that no one starts with an empty mind, that past knowledge or experience guides us in more ways than we are aware of, and that if one wishes, one can confine one's studies to the inner formal relations of what one already knows. But like James he is prospective for the most part. Knowledge to him is not the contemplation of what is already in the books, but is the conquest of ignorance. When he speaks of knowledge as problem-solving, he means of course that the kind of knowledge which interests him is problem-solving, not that no problems have been solved. This is the final rejection of authoritarianism. Presumably anyone could solve for himself all the old problems, and when Dewey writes about pedagogy it looks as if that were to be part of the program. But the mature man is envisioned as one who is struck with curiosity at all sorts of things, sees problems which no one saw before, and sets out to solve them. Ideas become the instruments by which this is done.

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[5] *Essays in Experimental Logic,* Chicago, 1916, p. 74. Quotations are from this work unless otherwise noted.

The notion of an idea as a plan of action is before us again. Our lives are primarily concerned not with looking but with action. "We think about anything and everything," he says (*op. cit.,* 75), "snow on the ground; the alternating clanks and thuds that rise from below; the relation of the Monroe Doctrine to the embroglio in Venezuela; the relation of art to industry; the poetic quality of a painting by Botticelli; the battle of Marathon; the economic interpretation of history; the proper definition of cause; the best method of reducing expenses; whether and how to renew the ties of a broken friendship; the interpretation of an equation in hydrodynamics, etc." But who is the "we" in this long sentence? The only answer is Dewey himself. He undoubtedly thought about such things and, identifying himself with the whole human race as most philosophers do, he forgot about the millions of people who give a minimum of thought to any problem and solve it by following ritual. It is the ritual which, he would say, is usually thought of as knowledge; and nothing is easier than to describe a ritual, how the ritual grows, and why it has the peculiar character that it has taken on are very different problems. Traditional epistemology resembles a geometrical system in that every step is where logic says it ought to be. Dewey's epistemology is rather like a psychological description of how the student of geometry sees and solves his problems.

Thinking then as a process, not as a completed act, was Dewey's concern, and it was for that reason that what he called logic was not recognized as such by logicians. No final definition of truth could be given by him since he knew that whatever satisfied the inquirer would have to be given that name. Since thought always arises, he says (*ibid.,* 80), in specific situations, it retires from the scene as soon as that situation is handled "successfully." But obviously what is success in the case of the battle of Marathon is not success in the case of a painting by Botticelli, and definitions of "success" would be too abstract to do much good to the philosopher. Each individual is the best judge of when he has solved his problems and need only question his solution—that is, make it a problem in its turn—when someone else confronts him with doubts which upset him, or when he himself discovers that his solution no longer works. The two terms of these conditions are important: (1) that the correction of ideas may be a social matter, (2) that solutions to problems are dated and may have to be corrected. The former shows that the experience of all members of the human race is not identical, so that ideas which are held in common are likely to be a compromise between a variety of experiences; the latter, that a given person's experience never exactly repeats itself. Both these items might have suggested to Dewey that the only formal logic applicable to experience is the rules of statistics, but he preferred to attack formal logic as a whole rather than find a substitute for it.

When one arrives at this point it is likely that the question will arise of what part objective fact has to play in knowledge. It was traditional to consider knowledge as a reflection of the outside world. Sometimes it was believed, and the belief was called naive realism, that one had only to look and see the world as it really is, our ideas of it being perfect replicas of it. On the other extreme was the view that we could never know the world as it is but only as the human mind distorts it. In between was the theory derivative from Locke, known as critical realism,[6] believers in which unfortunately differed widely among themselves. But all epistemologists have to admit that some statements are false and that their falsity is proved by what is called an appeal to the facts. If I want to know what the weather is like, I simply look and see. The facts are that the sun is shining or that the sky is cloudy or that it is raining or snowing or something of that sort. Why complicate the issue by dragging in hypotheses and problems and satisfaction and activity and interpretation? Dewey was well aware of the challenge which ordinary common sense presented and attempted to meet it in an essay called "The Control of Ideas by Facts."[7] After stating how the problem is handled by traditional epistemologies, Dewey proceeds to answer it in the instrumentalist manner. If we want to find out what the weather is like, we have to devise a plan for discovering it. If we are already looking out the window, we should never raise the question, for we would know the answer. Therefore, we must imagine ourselves to be in genuine doubt, and in that case we have to take steps to see what it is like. These steps have already been learned, and as adults we do not have to ponder over the right way of answering our question. We are applying a technique—or carrying out an idea—which we have already tested and found satisfactory. The control of the idea by the facts does not lie in a similarity between, let us say, good weather and an image of the sun shining; the sunshine *is* the good weather. Unless I misunderstand Dewey, the question, *What is the weather like?* should be translated into the question, *Is the sun shining?* or something similar. In that event no distinction has to be made between the weather and the sunshine (or the sensation or image of sunshine) but, rather, the sunshine is the answer to the question previously raised and its so-called ontological status is irrelevant.

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[6] The best statement of this position in English is A. O. Lovejoy's *Revolt against Dualism,* first published in 1930. It is specially important since it shows how, on the usual assumptions about the nature of a physical object, our sensory data cannot be physical.

[7] In *Essays in Experimental Logic.*

The trouble historically was that Dewey and his opponents were discussing two different questions. The traditional epistemologist was troubled by a situation which arose in physics out of the theories of the transmission of light and sound. Colors and sounds are (a) observed at a date later than that at which the light rays or air-waves left their sources, and (b) have properties which are not those which can be found at their sources. If we now see stars which went out of existence millions of years ago, then what we see is not the physical star, for that is no longer there to be seen. The physical star is both a mass of incandescent gases plus the light rays which extend through space-time however long and widely they travel. And if what I see or hear has properties which light rays and air-waves do not have, then what I see and hear cannot be the light rays and air-waves or else the latter must have inconsistent properties. Such a theory considers knowledge to be symbolized not merely by such sentences as, "This is a red rose," but also by such terms as "red," which say nothing about anything. The epistemologist who discusses the objectivity of colors can or cannot be in harmony with the epistemologist who is interested only in judgments. The subjectivity of a color or sound is irrelevant to the problem of what constitutes the verification of a complete sentence. But neither Dewey nor his opponents seemed to see that. The problem as phrased in the *Revolt against Dualism* can only be met by tackling the more fundamental problems of what is meant by a physical object, how we can constitute its objective frontiers—that is, where does it end?—and what precisely is the difference between a physical or any other kind of object and its effect? In Dewey's thought there seemed to be no sharp break between one object and another, all things flowing into and out of one another. The gaps between the various kinds of beings were of little importance to him and the world seemed like a great continuum in which the various areas had "significant" relations to other areas. Like James, the James of *Pragmatism,* he seemed to conceive of man as wandering about in this continuum trying to get from place to place with no map but his past experience to guide him. And unfortunately his past experience never could be counted upon to be a certain prevision of what the future held in store for him. He would not have denied, I imagine, that by limiting one's adventures to a circumscribed area, one could pretty well set up a pattern of behavior which would stabilize knowledge. And that seemed to him to be about what philosophers of the rationalistic tradition had done. And indeed when one reads the articles and books which continue to appear on sensory data, one begins to believe that Dewey was right.

3. Josiah Royce

The third of our philosophers of action is Josiah Royce (1855–1916). Royce like Dewey had studied at the Johns Hopkins University where they had been under the influence of Charles Peirce. But Royce's interests led him toward metaphysics and religion, rather than confining him within the fields of epistemology, logic, and ethics, with the result that he is best remembered for the obsolete portions of his works. He was, as a matter of fact, much more involved in "practical problems" than his colleague James. He wrote books and articles on such questions as race relations and the elimination of war, and in fact there were few fields of inquiry into which he did not venture. His work in logical theory and the applicaton of statistics to scientific problems, though it was influenced by Peirce, nevertheless contained much that was original with him.[8] His historical essays in *The Spirit of Modern Philosophy* are among the best productions in that field which Americans have made. Though his style has proved unattractive to the taste of our contemporaries, they would do well to overlook its Germanic ponderousness and uncover what it sometimes conceals. It was one of his tricks to use old words with new meanings and unfortunately it was a trick which worked too well.

Royce had learned from Hegel that the only way to understand a philosophy was to act as if one believed it and thus work it out "from within."[9] For a philosophy, like any other doctrine, is as much an attitude toward the universe and human experience as it is a set of theorems. The *Phenomenology* was an experiment in thinking in this manner and, for its author, such terms as "empiricism," "materialism," "idealism," and other doctrinal labels were programs for life as a whole. They could be formulated in a system of propositions, but the propositions had implications which were as much directives as generalized descriptions of the world. A materialist, for instance, assuming him to be consistent, would be a materialist in his aesthetic appreciations, religious ideas, treatment of his friends and family, attitude toward the state, as well as simply saying that he believes everything in the universe to be describable in terms of physics and chemistry. There are no such people. But Hegel is making "thought-experiments" and the experiment would be senseless unless one believed reason capable of guiding a man's whole life. It should be remembered that reason for Hegel was the child of Kant's practical reason, and reason for Royce was the child of Hegel's reason.

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[8] See *Royce's Logical Essays,* ed. by Daniel S. Robinson, Dubuque, Iowa, (1951).

[9] This has been called by Dr. J. Loewenberg taking the histrionic point of view. See his "The Exoteric Approach to Hegel's 'Phenomenology,'" *Mind,* XLIII (1934), n.s., 172, and "The Comedy of Immediacy in Hegel's 'Phenomenology,'" *ibid.,* XLIV (1935), n.s. 173.

His justification of this point of view is seen in all his works to which such discussions are relevant but emerges with special clearness in *The World and the Individual.* There he distinguishes between the inner and the outer meanings of ideas, and ideas, he says (vol. I, 22), are the embodiment of purposes. They are plans of action in that the volitional and intellectual aspects of them are never separated in existence. As a purpose an idea is an act of will which demands fulfillment but is neither the mere purpose nor the mere fulfillment of the purpose. He refuses to call a color or a noise an idea (*ibid.,* 24), in spite of the empirical tradition, for neither is in itself a purpose nor do they evoke necessarily any action. But they may both enter into ideas when (the example is not Royce's) the red becomes the symbol of a nation or a school or the sound a command to act or desist from acting.

But a purpose which is not carried out remains a dream at most. And every plan of action is correlative to sets of circumstances which make its fulfillment possible and which will constitute its fulfillment. Thus if my purpose is to write a fugue in a certain key, the rules for fugal composition and at times the instrument or instruments for which it is being composed will determine to some extent what it will turn out to be. Again, one may have, as Royce himself did, an idea for keeping international peace. In his case the idea was set forth in his book, *War and Insurance.* His plan was never tried and the purpose remained embodied in the book which expounded it. If it had been put into practice, then the whole machinery for insuring peace when operating would have been the external meaning or the embodiment of his idea. The idea is thus not an image of objects of one kind or another. But nevertheless each idea is correlative to a single embodiment or fulfillment when precise or to a set of such embodiments when vague or general. As Royce clearly saw (*ibid.*, 27), this conception modifies the whole problem of the relation between ideas and being.

Now the objectors to this theory will point out that the real material world of fact stands out there stubbornly limiting our purposes and sometimes defeating them. Hence, Royce is determined to show that every brute fact is itself somehow related to the purposes of the man who is struggling to understand it. The fact, he maintains (*ibid*, 32), gains cognitive relevance only by an act of the knowing subject. The meaning of the word "fact" might be equated with "that which verifies an idea." But if that is so, then the idea itself determines what facts will verify it and what will not. Before looking at the facts at all, we know that some are irrelevant. If we are measuring a room, we know ahead of time that the color of the walls is irrelevant. But how do we know this? Clearly, through our conception of what measurement is. That conception is going to determine the limits of permissible error, the instrument which we shall use to make the measurement, and the metric system in terms of which we shall make our calculations. But all this is decided upon before we begin our actual work. And all these details and others like them are conventions established by us, not by the room. When the room is being measured these conventions eliminate certain considerations as either trivial or, as said above, irrelevant. The idea or purpose which we have in mind translates the room and all its attributes into factors of cognitive significance and, however objective a being may be, as long as it is external to knowledge, it says nothing. To make it say something, we must first give it meaning within a set of ideas.

The situation, as Royce saw in one of his later books, *The Problem of Christianity,* is that of signs and their meaning. Language, for instance, is simply a conglomerate mass of sounds when considered "objectively." We have established meanings which these sounds express and these meanings can be equally well expressed, except in a few cases, in any one of a large number of sets of sounds, wherein each set is called a language. But sounds acquire meaning and do not have any in themselves. No two sounds could be much more different than *maison* and *house* and yet they mean the same thing. Consequently the meaning cannot reside in the sound as sound. The sound has become a sign of something else; it has become, to use the terminology of Professor Charles Morris, the vehicle of the meaning. So perceived objects and sets of objects turn into facts, according to Royce. If there were no human beings about, they would either have no meaning whatsoever or meaning simply for whatever animal minds might exist. An object which to us might be the fulfillment of an economic purpose, such as a fast-flowing river, to the beast might be simply a place from which to drink. And it is equally true that the same object might have a variety of meanings, the variation dependent upon the human interest which was fulfilled—or objectified—in it. Thus our river is not only a source of power, but also a supply of water, an aesthetic item in a landscape, a place for recreation. What it means depends on what purpose is being achieved, and it is only historical accident which gives it one name rather than another. For instance, rivers were called a source of motive power after they were called rivers, for the simple reason that the invention of the water wheel obviously came later than the discovery of rivers. But, similarly, in the Occident a man retains his given name throughout his life and does not change it when he enters school, leaves the university, becomes involved in a business or profession, or retires, though there are societies where similar things are done and we, too, sometimes modify our names slightly from time to time.[10]

An idea, then, while being a plan of action, may be envisioned from either the internal or the external point of view. But if Royce had left things in that condition, there would clearly have been no one set of ideas that was eternally true, and in the long run everyone would have been able to pronounce his ideas just as true as anyone else's. This was repugnant to Royce. He advanced beyond this type of personal relativism by pointing out that no single plan of action was ever going to be completely fulfilled in a single act or by a single object. Both he and Dewey had been thoroughly drilled in Hegel's philosophy and, though Dewey rejected whatever remained of it in his system, Royce retained the notion that all ideas are interrelated and form a universal network in which every detail is dependent on every other. No individual purpose is ever to be fulfilled completely in any individual's life separated from the lives and purposes of his fellows. Students at least know that the information they acquire as they go through school and university comes from so many sources that it would be next to impossible to count them. One looks up a word in the dictionary and finds a definition. But that definition itself, though usually stated anonymously, is, as we all know, the work of dozens of brains. Learning, which seems like an individual's enterprise, is in reality a social enterprise. We speak sentimentally about the combined work of many hands, and the sickliness of the expression makes us overlook its truth. The value of what we have learned turns upon the value of the work done, and if we are misled by false ideas, the blame rests as often as not on some undiscoverable author. If we were to be precise in our statements, we should say, for instance, "This word means *xyz,* if twelve or thirteen lexicographers have made no mistake in their researches, and the trustworthiness of what they report depends on the trustworthiness of the reports of twelve or thirteen previous lexicographers, and so on." That of course is not the way we learn a language except when it is a dead language or an exotic language. But the point of the illustration is simply an indication of the complexity of terminating a purposive process.

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[10] Most people lose their baby names, their boyhood nicknames when they grow up. Some, however, do not.

Both Royce and Dewey shared the belief that one thing leads to another and that therefore the world must not be thought of as a collection of atomic *things* lying side by side but having no relations of dependence to one another. The minute something becomes a subject of discourse and thus acquires relevance, its interrelations may take on unforeseen importance. Royce differed from Dewey temperamentally in arguing to the infinity of external meanings which any idea would have once its internal meaning was completely fulfilled. Hence for him it made sense to say that "To be means simply to express, to embody the complete internal meaning of a certain absolute system of ideas, . . . a system, moreover, which is genuinely implied in the true internal meaning or purpose of every finite idea, however fragmentary."[11] There was no dialectical reason why Dewey should not have continued to this point; I suspect that the reason was purely psychological. He had no love for absolutes.

Once Royce had laid down his foundations in this theory of the nature of ideas, he proceeded to show that by emphasizing one aspect or another of the situation and neglecting the others one could construct any of the major metaphysical positions of the past. Thus by emphasizing the objects which fulfill our purposes, the facts, we have realism; by emphasizing the internal meanings and forgetting their embodiments, we have mysticism. In the former case we recognize the control which the external world has over our thoughts and forget that thinking determines what control it will have. In the latter we recognize the necessity of being immediately aware of whatever it is that we believe, that the purposes must be *our* purposes, and that therefore we must identify ourselves as a knowing subject possessing its objects. Immediacy when pushed to its limits denies any distinction between subject and object, and even in those epistemologies which seem farthest from the mystic limits,

[11] *World and the Individual,* Vol. I, p. 36.

such as sensationalism, the distinction between subject and object disappears when one is confronted with a sensory datum. A third type of theory, called by Royce Critical Rationalism, admits the existence of both idea and object and defines the real as the "empirically verifiable truth" (*op. cit.,* Bk. I, 61). Reality according to this theory is whatever experience shows it to be; but first, experience includes the experience of nonphysical objects, such as moral values and mathematical beings, and second, it is always interpreted and corrected by the reason. The fourth point of view, that of Royce himself, he calls the Synthetic, for while recognizing the claims of the three preceding theories, it fuses them all into one. By assuming the "histrionic point of view," Royce is able to give a sympathetic account of realism, mysticism, and critical rationalism, and he is enabled to take this point of view because he believes philosophies to be "ways of life," and not simply sets of sentences with which the philosopher plays.

If reality is neither the internal nor the external meaning of an idea in isolation, it must be a synthesis of the two, for there is no other possibility. On the one hand stands a plan of action unachieved, on the other the possibility of achieving it. The will which aspires after the unattainable, longing for longing's sake, striving for frustration—none of these acts seems acceptable to Royce. The simple fact that most of our purposes are, in fact, unfulfilled leads him merely to posit an immortal life in which they will be fulfilled. The simple fact that no human being has that perfect union of purpose and fulfillment which would make him a real individual in Royce's eyes leads him to assert that only the Absolute is a real individual. "An individual being is not a fact independent of any experience, nor yet a merely valid truth, nor yet a merely immediate datum that quenches ideas. . . . On the contrary an individual being is a Life of Experience fulfilling Ideas, in an absolutely final form" (*ibid.,* 347). This point of view accepts the authority of the facts (Realism), the union of reality and ideal meaning (Mysticism), and demands validity (Critical Rationalism). To adopt the Synthetic metaphysics, however, is to reject whatever seems to be fragmentary and to assert as an axiom that whatever is, is one. It was apparently inconceivable to Royce that the universe might be disconnected, a plurality of things whose relations were fortuitous, stubbornly resisting any attempt to rationalize them.

There was a streak of hard common sense in this doctrine which seldom shines through the rhetoric. To say that a man's purposes are never achieved this side of the Absolute, that the self is an achievement, not a datum, and that ultimate truth is an aspiration, not an attainment, is to say things which most of us have suspected but few have utilized as the basis of a philosophy. Royce early in his career saw that the existence of error was a clue to the nature of truth. For how can a man be mistaken unless there is some absolute standard of correctness—or validity? It was through his ready acceptance of a man's imperfections that he developed his ideal of perfection and, however religious his language may have been, he never denied that our terrestrial life was an inquiry and not an answer. When he called himself an Absolute Pragmatist,[12] he was emphasizing the conditions under which practice could alone be completed. Those conditions are never limited by any person's experience, for they are ideal conditions. The bewildering thing about this is that he apparently never suspected that the ideals did not form a consistent and harmonious system but quietly assumed that they must form such a system, just as Kant, certainly not the most uncritical modern thinker, assumed that the world must be so constructed that men could live morally within it.

When one asks just what the absolute set of conditions is, the answer is that it is that which makes communication possible. In the *Problem of Christianity* there is a series of chapters setting forth Royce's theory of signs and interpretation. There one will find the most concrete description of the nature of the Absolute, identified by Royce with St. Paul's Beloved Community. Interpretation becomes necessary since the data with which knowledge is concerned are not self-revelatory. They do not shout their meaning at whoever looks at them. Questions are put to them and their answers become significant only in the total context of one's purpose. That is why the same datum may have many meanings. A rainbow will mean one thing to the physicist, another to the child, a third to the man steeped in Biblical legend, a fourth to the farmer. These meanings arise in response to the problems of the individuals concerned. The simple datum, the bow of seven colors, in itself and cut off from human interests is meaningless.

The act of interpretation, out of which both philosophy and science arise, and indeed in Royce's opinion any intellectual discipline, is a third process in cognition, of which the other two are perception and conception. Philosophies of the past, says Royce,[13] have overlooked the role of interpretation and have seen the cognitive problem as the choice between percepts and concepts. Yet no pure percept or concept was ever enjoyed by a mortal, and in actual knowledge all of us use a fusion of the two; and that fusion is interpretation. If we differentiate the types of knowledge by their characteristic objects, perception becomes the knowledge of sensory data, conception the apprehension of universals, and interpretation the knowledge of "either something of the nature of a mind, or else is a process which goes on in a mind, or, finally, is a sign or expression whereby some mind manifests its existence and its processes" (*Problem,* Bk. II, 129). That this type of cognition is not like the other two is evident when one translates a sentence from one language into another. Most of us started our classical education by reading the sentence, *Gallia est omnis divisa in partes tres.* To bring into consciousness the English meaning of that sentence demands, to be sure, a visual or auditory perception of it. The common noun in the sentence, *partes,* the adjectives, *omnis* and *tres,* and the verb, *divisa est* are universals or conceptions. But though one see or hear the sentence and know the English equivalents for the universals, one cannot on that basis alone translate. One has to have a set of rules in mind which in this case are syntactical and grammatical. Interpretation consists in applying the rules of interpretation to percepts and concepts. By the time we are fed this sentence, we have absorbed these rules and translate it at once without even being conscious of how we are doing it. If this sort of activity is not knowledge, then of course the discussion is beside the point. But the results of it resemble knowledge so closely as to be indistinguishable from it. What is the difference between looking at a rainbow and saying, "That is a rainbow," and looking at Caesar's sentence and saying, "That means, 'All Gaul is divided into three parts' "? In both cases a judgment is made which may be true or false. The only difference between them is their ostensible objects, in the case of the rainbow the object being a set of colored bands, in the case of the sentence a complex of verbal signs.

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[12] See his "Principles of Logic" in *The Encyclopaedia of the Philosophical Sciences*, pp. 121–29. Cf. *Sources of Religious Insight*, p. 145, and *Problem of Christianity*, Vol. II, p. 123.

[13] *Problem of Christianity*, Vol. II, 119.

Royce points out that the process of interpretation is of varying degrees of complexity. To continue with our own example, the second sentence of Caesar's Commentary is *Hi omnes* [the inhabitants of Gaul] *linga, institutis, legibus inter se differunt.* The glossary of the textbook edition from which I am quoting apparently was made up by a man who foresaw difficulties with the word *institutis.* Consequently it is translated, "design, intention, mode of life, habit, custom." Which of these it is to be is left to the student. But how does the student know which of these renderings to make? We usually get out of the difficulty by saying that the context tells us. But that context will involve in all probability a little disquisition on the part of the Latin teacher, for unless students have changed entirely from what they were fifty years ago, the boy will have translated the word *institutions* and the teacher will have asked him what an institution is. A social situation is immediately created, and the kind of knowledge wanted will emerge only out of the common activity of the student and teacher and author of textbook, determined in part—but only in part—by the percepts and concepts involved.

This is a very elementary example of interpretation as distinguished from perception and conception. But it contains all the factors which made Royce insist upon its importance for any thorough epistemology. Whether we are dealing with a simple problem of meaning such as that cited or the more dramatic problems of understanding other people and ourselves, we shall come up against the same difficulties. Interpretation is always a triadic relation of which the terms are the interpreter, the sign to be interpreted, and the person for whom the interpretation is made (*ibid.,* 142). Now frequently the person for whom the interpretation is made is oneself, and one appears to be both interpreter and person addressed. For the self seen from this angle is stretched out in time, and the present self may be interpreting the motives and acts of the past self to the future self. Interpretation is always a conversation, a social enterprise. And though it begins as the interpretation of a given sign, the interpretation itself becomes a new sign requiring interpretation. It is an endless process which "can be terminated only by an external and arbitrary interruption, such as death or social separation" (*ibid.,* 150). As a matter of cold fact it is usually terminated by fatigue or the force of authority, but Royce was never sensitive to the power of either.

Out of this simple *aperçu* Royce derives a metaphysics in which the greatest reality is the community of interpreters, the selves who strive for self-enlightenment through communion with others. It is a world in which the central element is the problem of meaning and the central activity the discovery of meaning. To Royce only minds could possess or confer meaning and, consequently, interpretation for him was proof of the ideal nature of reality. They stand against these men who "in desire hasten to enjoyment, and in enjoyment pine to feel desire" (*ibid.,* 162). Since each of us at some moment or other becomes an interpreter and is dominated by the will to interpret, so each of us becomes a self and integrates his purposes into an inner community of purposes. But since no one's purposes can be fulfilled by himself alone, society, too, becomes—or can become—a larger self which in the long run includes the dead and those unborn as well as the living. For not only our problems, but also the tools for solving them, are in part bequeathed to us and we shall bequeath others to our children. Inasmuch as Royce firmly believes that truth in an overindividual sense must exist, he also believes in the existence of an eternal self in whom we live and move and have our being.

Dewey never went so far and was content to recognize the obstacles to complete knowledge as final. He was more willing to accept each individual as definitely shut off from entire communication with his fellows. Were one to indulge in psychological speculation, one might see in Dewey the Vermont farmer brought up in the atmosphere of the town meeting in which each man has his say and the consensus is majority rule; Royce as the Californian pioneer to whom the frontier is open and the creation of a community the major problem of life. But we shall leave such interpretations to wiser men. However, it must also be said that Dewey throughout his career was haunted by the specter of German idealism which he wished to escape from at any cost; Royce was glad to embrace it and develop it to what he believed to be its immanent implications.

CHAPTER 20

The Acceptance of Time

It is safe to say that until the seventeenth century few if any philosophers took time seriously. Aristotle's definition of it as the measure of motion seemed to make it unnecessary for them to give it any reality, for motion and change were always something to be explained away. A world of static and perfect ideas, a world of unchanging matter, a world of things-in-themselves, a world of eternal beings, even a Heaven to be inhabited by souls cleansed of all terrestrial and hence temporal attributes, were realms to which the philosopher "weary of time" could flee. But with the development of the infinitesimal calculus, of the statistical method, and of the theory of probability, the tools were invented for handling change without reducing it to a phenomenal aspect of the unchanging. With the growing interest in history, not only political but geological and biological, which eventuated in evolutionistic theories covering the whole universe, the emotional tone of the word "change" was shifted from one of distaste to one of praise. As Engels saw, it was difficult for an evolutionist to believe that change was always evil, though the assumption that it was always in the direction of the good was equally irrational. By the middle of the nineteenth century, such terms as the dynamic, the vital, the creative began to be substituted for the immutable, the mechanically perfect, the eternal as marks of high value and, though the evidence of universal progress from bad to better was pretty thin, change itself and, consequently, time could no longer be safely rejected.

1. J. S. Mill

In the field of scientific method, the shift is indicated in the attempts that were made to build up a theory of induction. Perhaps the most influential contribution in that area was made by John

Stuart Mill (1806–73) in his *Logic.* Mill was satisfied to take experimental methods as he found them and to codify them in a set of rules for the discovery of causes. His canons of induction have been severely criticized and justly if one refuses to accept Mill's problem as legitimate. His critics assume that the business of logic is to work out a set of formulas which will give us consistent assertions, whereas Mill himself was interested in the process of discovery. How do we actually come upon new truths, not how we can systematically arrange truths already discovered, was his problem. It was to be essentially that of Dewey when Dewey equated logic with a theory of inquiry. The logic of Aristotle and of the *Principia Mathematica* of Whitehead and Russell is a logic of exposition. When applied it becomes at most the art of exposition. It is neither a tool for inductive causal inference nor for prophecy. And that is why its practitioners are more likely to indulge in analysis of ideas already in one's possession than in making inferences of a speculative nature. But Mill grasped the simple fact that scientists were making discoveries which were true, that these discoveries were not only true of their own limited experience but of the past, the future, and distant regions of space, that they proceeded outward from the immediately given by arguing from cause to effect and from effect to cause,[1] that by their methods they had learned not merely how to predict but also how to control the course of events. The conquests of natural science, both the historical sciences such as dynamic geology and paleontology and the laboratory sciences such as classical physics and chemistry, could not be denied. Who would have been so bold as to say that the results of medicine, agriculture, engineering, were illusory? But the improvements which anyone could see in fields appropriate to these practices were possible only because of improved scientific techniques. One might feel disgust with man's interest in such things as good health, public hygiene, bigger and more productive farms, hard roads and solid bridges, but one could not deny their reality, as if they were a sort of collective hallucination. That someone should then say that these practices should be investigated in order to see by what rules they proceeded was not surprising. And since it was clear that these rules were not those of Aristotelian logic, it was understandable that Aristotelian logic should be neglected.

The two disciplines were different, and what was said of the one could not be properly applied to the other. But philosophers have a habit of using a term which means something of which they disapprove to name something else of which they do approve and then saying that it "really" means the latter. Logic for centuries had meant formal logic and there was little justification for Mill's applying the term to scientific method. But since he did so and since anyone who could read could also tell that he was not formulating a new Aristotelian logic, there was no point in people's writing books to show that it was not that logic. Once one has reached certain conclusions, whether by experimentation or intuition or revelation, one will want to know how they hang together, what inconsistencies they may exhibit, what follows from what. At that moment some form of pure logic will be applied in spite of one's prejudices against it. We know from formal logic that if p implies q, we can infer q from the assertion of p; we also know from the same source that we cannot infer p from the assertion of q. But formal logic will not tell us whether p is true or not nor, except in cases of what was traditionally called immediate inference, that p does imply q. That information can be acquired only from observation, experience, the actual manipulation of the existent world. What Mill and his followers were insisting upon was the priority of induction in discovering what assertions were empirically true. In so doing they were accepting the world of space and time as ultimately real.

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[1] He might also have added, from natural rhythms and cycles.

So Cournot when he made a distinction between history and science and emphasized the role which chance played in the historical events which might interest a philosopher. So, too, Henri Poincaré when he pointed to the contribution of convention to the formulation of hypotheses; so Vaihinger in developing his theory of fictions; and Meyerson in uncovering the constant techniques of explanation and labeling them the *a priori*.[2] We know that people who have never studied logic can think logically and we also know that several of the theorems of plane geometry were used in practice before the *Elements* of Euclid were written. This situation which has not passed unnoticed has given rise to several theories of the relation between logic and practice. Some have maintained that the laws of logic—the so-called laws of thought—are innate ideas, others that they are the ways in which the mind inevitably operates when it thinks correctly; others that they are abstracted from practice; others that at least one of them, the law of excluded middle, is a convention which could be supplanted by others. No one, to the best of my knowledge, has ever proposed a substitute for the law of contradiction, though some have interpreted it as an ontological law and not simply a logical rule. But whatever one's theory of the interrelations between logic and practice may be, as soon as one tries to discover the former in the latter, one has located the thinking subject in the historical situation and denied the ultimate duality of what we might call, for short, time and eternity. For now thinking itself, which in Aristotle went on without even the co-operation of the body and which had so often been considered as the springboard to a timeless world, the one escape from history, becomes as much of an historical event as being born and dying.

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[2] For Poincaré, see his *Science and Hypothesis;* for Vaihinger, *Die Philosophie des Als-Ob* (translated as *The Philosophy of the As-If*); for Meyerson, *Identity and Reality.*

It now becomes also possible to write the history of intellectual techniques and not simply the annals of their discoveries. It becomes reasonable to assert that the very methods which scientists have used to achieve their results have evolved and were not given with the Creation. Ideas, which had usually been thought of as above the contingencies of space and time, are now seen to have a history, to spill over their original frontiers and take on new significance. Were the implications of this point of view to be developed, it would prove to be in all probability as revolutionary as the *Critique of Pure Reason*. For it would show that there is no universal criterion of right thinking but that thinking, like economy, politics, art, warfare, and language, is determined by the total complex of living or else that it proceeds on a course which is self-determined or purely accidental.

2. Spencer

As we have hinted above, evolutionism as a technique of explanation was one of the determinants in the general acceptance of time. The theory of biological evolution has a long history going back in its modern form to the eighteenth century. But it reached its greatest moment in 1859 with the publication of Darwin's *Origin of Species*. The very title of this book was a challenge. Tradition had it that the nature of a species was to be immutable, for a species was a logical class in which all members shared a common attribute or set of attributes. If man was a rational animal, then all rational animals were men, and if any anthropoids were to be found who were not rational, the only conclusion permissible was that they were not really men. Thus children might be potential men, idiots might be monstrous men, and barbarians might not be men at all. In fact, it took a bull of Paul III to determine the humanity of the American Indians, so little rational did they seem to Europeans. Humanity, like any other essential trait, was eternal in the sense of timeless, and the vicissitudes of history could no more change it than they could change the nature of triangles or circles. How then could they have an origin?

One of Darwin's arguments for deducing a change in species was variation within species. Every observable trait seemed to be found in different quantities and no two animals or plants of the same species seemed to be identical. Something analogous to this had been known since the days of Plato, but the Ancients explained variation within a species as the work of matter. To Darwin, as to his predecessors, variations were to be expected; they were not monstrous nor blemishes on the face of nature and they required no explaining away. In fact, it was believed that they arose accidentally, which meant that they need not be explained. As everyone knows by now some of these traits were perpetuated by natural and sexual selection and thus new species arose in the biological world. But species were also to be found in the psychological world, in the social world, and in every other world where classification was a preliminary to study. Things fall into groups and the question always is whether these groups are everlasting or temporary. If the former, they are usually supposed to be rooted *in rerum natura;* if the latter they are said to exist for human convenience and to be modifiable when they no longer serve any useful purpose.

The most representative evolutionist and the most thoroughgoing was Herbert Spencer (1820–1903), a philosopher whose vogue was as great in his own day as it is small nowadays. Spencer was an evolutionist before the publication of the *Origin of Species,* and he extended the formula to cover all subject matters. Everything was in process of evolution, and in a famous sentence he framed a definition of evolution which is the laughingstock of logicians and nevertheless as careful a piece of exposition as any on record. Evolution, he said, was (1) a continuous change (2) from indefinite, incoherent homogeneity, (3) to definite, coherent heterogeneity, (4) of structure and function, (5) through successive differentiations and integrations. Logicians ridicule this since it looks like defining a term in terms which are obscurer than the term to be defined. But it is in spite of that a very simple formula to grasp. The first point denies any breaks in the evolutionary process, thus denying in advance of its discovery emergent evolution. Evolution proceeds without gaps and one ought always to be able to find examples of stages between any two stages in an evolutionary process. Because of the continuity of the evolutionary process, one may miss the fact that something is actually evolving. The second point assumes a kind of undifferentiated stuff which is indefinite and incoherent in that it has no recognizable structure and no parts which might have separate functions. A pool of water or a mass of molten lead might be a good picture of such homogeneity. Spencer thought—wrongly—that the egg is an example of such homogeneity, that the solar system had once been an unorganized nebula, and that society had been originally a confused horde of individuals wandering about like clouds. Out of these homogeneous but incoherent stuffs there arose a differentiation of parts which took on specialized functions. This is observed in the embryos of animals as the various organs begin to appear and take on their specific roles, though there is no longer any doubt about the complexity of the stuff from which they emerge. In societies a division of labor distinguished man from man and soon an organism grew up which differed from biological organisms only in the parts retaining consciousness and hence rights. The differentiations occurred in structure and function, as might be seen in the differences between the human foot and the human hand both of which were presumably derived from similar original organs. The last feature of Spencer's definition provides for retrogression as well as for progress.

Whatever the faults of this formula, they do not arise from obscurity. The picture it gave one of a universal process was clear and, if one did not stop and think, it was persuasive. The moment one did stop and think, certain problems arose which were fatal. In the first place, if evolution were always going on, why did some animals and plants and societies and arts remain in what should have been a primitive condition? In Comte there was a recognition of the possibility that individuals thought differently and that consequently any period of history would present specimens of arrested intelligence. In Spencer such phenomena could be explained only as evidence of retrogression and there was no reason to believe that the Tasmanians, for instance, had ever reached a more advanced stage than that from which they had fallen. If one were to reply that differentiations of structure and function arise out of response to environmental problems and are retained through natural selection, then evolution is not universal. For, keeping our social example, (1) the primitive horde is differentiated either by a natural process of growth, as the embryo develops, or dies as the embryo dies; or (2) the primitive horde is differentiated as the result of local conditions and determinants and not in exemplification of a universal law. A society might very well continue according to its traditional pattern for millennia as long as its traditional pattern worked, and, indeed, we find in modern societies many institutions that are retained though they do not work. An organism cannot remain in an infantile, to say nothing of an embryonic, stage no matter how delightful or satisfactory it finds it. It goes through its life-cycle willy-nilly. When we transfer the traits of one thing to another, we are indulging in metaphorical thinking, and that kind of thinking is the more useful the closer the resemblance. We should not labor this point were the fashion of arguing about societies, cultures, and civilizations as if they were organisms not so popular. But if societies resemble organisms in that they have a life-cycle, then we should not be able to find societies which have remained in infancy, in childhood, or at any other fixed period of development; we should be unable to explain anything about social history except birth and death, the periods between being determined by natural law; we might expect different species, if not genera, of society with different standards of behavior, different modes of government, different economic structures, and there would be no more reason to look for general laws governing them all than there would be in the case of vertebrates and invertebrates. Interestingly enough, this is what we find in insect societies. The apian society apparently is just as it has always been and no entomologist looks for different types of hive in the same species of bee. A hive comes into being in a definite way and develops in a definite way. But the bees in Italy do not have one kind of hive and those in North America another, if they are the same kind of bee. No beehive has meetings in which the question of the division of labor between queen, workers, and drones is discussed, with a view to modification of the system. Nor can bees, as far as we know, meet an environmental challenge by a change in social structure. The Spencerian type of social evolution would demand a similar conformity to law on the part of human beings.

If we go into such detail it is not that anyone any longer accepts the Spencerian system in its entirety. But nevertheless the notion that one can interpret social history on the analogy of individual is still very potent. Spencer had, however, one advantage over his modern colleagues. He did not foresee death in a society as a normal process, and he retained enough good sense to see that the individual components of a society did not lose consciousness simply because they were socially organized. A society might have its misfortunes, but it could meet them and it might be preserved through natural selection. Similarly the individual was never to live for the state, for the state had no consciousness of its own. Social souls and spirits were pure myth to Herbert Spencer and, in spite of his belief in a social history which was different from the history of a mass of individuals, he did not believe that it was the "expression" of a group-consciousness.

It may well have been puzzles about the *modus operandi* of evolution which led to Spencer's belief that behind the changes which are recognizable to the human eye lies a governing power which he called The Unknowable. For he finds difficulties in such philosophic notions as that of cause, space, time, motion, and the like, which he cannot solve. These are philosophic ultimates. We need them in articulating our opinions and in answering our questions. But we cannot explain what they mean in terms of ideas which are logically prior to them. Whether his particular set of ultimates is correct or not, he was right in thinking that all reasoning starts from indefinables. But he was equally wrong in thinking that he had thrown any light upon them by erecting the Unknowable into a power behind things which ran them as an engineer behind his engine. Spencer's ultimates served the same systematic function as Kant's categories. But whereas Kant flatly stated that the categories were the way in which human beings organized experience, Spencer made a mystery of it. There is no mystery in the fact that human beings cannot live under water. To raise the question of why we are so constructed that we have to absorb oxygen from the air is to change the meaning of "why" from the scientific "why" to the religious "why." The scientific answer would be a thorough description of the physiology of the human organism. The religious answer would be, I suppose, an expression of some purpose that is served by human beings breathing oxygen out of the air, such as the necessity of providing plants with carbon dioxide so that the proper balance between animal and plant life might be preserved.[3] We understand such terms as "cause," "matter," "force," and so on much better through definitions than through awe. If a term is really ultimate, there can be nothing beyond, behind, beneath it, and to regard it as a mystery is about as reasonable as to wonder why a circle has 360 degrees.

Yet Spencer's position seemed to satisfy great numbers of readers in both England and the United States. It probably gave them a feeling that here was a philosophy which would take the place of religion. The Unknowable was surrounded by just that degree of mystery which surrounded the idea of the Unmoved Mover or the First Cause, words which took over the burden of the more traditional name of God. To say that one was an Agnostic seemed more dignified than to say that one was ignorant. Agnosticism, like Positivism, could wear a religious cloak while remaining philosophical.

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[3] I trust that there is no need for me to point out the absurdity of this "answer."

3. Ravaisson and Bergson

It will be recalled that the first work of Maine de Biran to be published was an essay on the influence of habit on thought. Thought for Biran was, as it was for Descartes, all the processes of consciousness, and the influence of habit was to stabilize and fix certain ways of thinking. This arrested the flow of consciousness and added a new obstacle to man's effort to apprehend the world about him. In 1838 another Frenchman, Félix Ravaisson (1813–1900), presented a thesis for the doctorate on *Habit* which introduced some new points and which became a classic in French philosophy.

Habit, Ravaisson pointed out, had the peculiar property of remaining in our conscious life after the change which had occasioned it had disappeared. Thus it arises out of past actions and remains to determine future actions. In other words, when a new occasion arises in our life, we must learn to meet it or, in the language of our own time, to adjust to it. But oddly enough once we have met the challenge of novelty, our habit will remain as a potential way of meeting similar challenges whenever they appear. Habit becomes, as Ravaisson says, not merely a state but a disposition to act in this way rather than that.[4] A habit becomes fixed by simple repetition of the act which first induced it. At this point he might have concluded that consciousness has two tendencies, a tendency to modify itself when problems are presented to it and a tendency to repeat old ways of meeting problems. But since he had not yet thrown off the intellectual habits of his forebears which demanded that in all change there must be something which undergoes the change and which is itself immutable, he concludes that here, too, there is a subject of the change as well as the change.

Reverting to the Aristotelian tradition, for he had been a close student of Aristotle, he lays down what he calls a fundamental law of all being: the tendency for all things to persist in their manner of being. And he immediately moves on to assert that space is the most elementary and obvious condition of stability and time of change. Even the most rudimentary form of change, local motion, persists due to the influence of space. Recalling Schelling's philosophy of nature, without however acknowledging his debt to him, he then proceeds to point out that true habit begins to appear only when one mounts the hierarchy of existence and is found in its most characteristic form only in living beings. The reason for this is that in the purely material or spatial world there are no individuals. "In a complete homogeneity, there is being no doubt but no beings" (*ed. cit.,* 4). Beings, individuals with an organization of their own, are always heterogeneous and they reach their completed state of organization only after a lapse of time. In other terms, habit appears only when there is life and growth.

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[4] The thesis was reprinted in the *Revue de Métaphysique et de Morale,* 1894. I am using this edition.

We have then at the roots of his philosophy a sharp distinction between space, matter, local motion and homogeneity on the one hand, time, life, growth and heterogeneity on the other. Purely material things have no individuality and, what is more, are completely understood "from without"; living things which always are individuals can only be understood "from within." Like Schelling again, he distinguishes between the reign of necessity and the reign of spontaneity or, in his own language, Nature. The former receives action from the external world and whatever behavior it manifests is entirely explicable in terms of physics; the latter contributes action to the external world, modifies it, and instead of being purely receptive is spontaneous. Nevertheless it must be recognized that life cannot continue without a material world. And Ravaisson is far from denying its importance, to say nothing of its existence. But he wishes to locate it in the hierarchy of beings and by calling it the condition of vitality, thinks he has done so. Life is, in fact, the opposition between receptivity and spontaneity, but it is the latter which differentiates it from the inorganic world. What is particularly important in his eyes is the fact that as habits are acquired, the living being becomes less and less dependent on external material conditions for the way in which it lives. The pattern of life is determined therefore from the organism's ability to form habits. And as organisms become more and more complex, they become more and more remote from the determined patterns of the spatio-material world and more and more able to form new and more complicated patterns of life. The plants and lower animals have fewer potentialities for change, the higher more.

Because of the sharp opposition between matter and life, necessity and spontaneity, we find Ravaisson saying that matter exists out of time. But life is essentially temporal implying "a definite and continuous duration" (*une durée définie, continue*). Along with this opposition of substance goes an opposition of function. To understand the spatial and material world we use such categories as diversity and quantity, for matter can be grasped by us only as a sum of particles, not as the kind of unity which is our own nature. The unity which we confer upon matter is a projection of our own unity which endures throughout time. This unity is grasped through our self-awareness; we have a direct intuition of our own subjective unity. But this very unity arises out of the interplay between mechanical law and vital freedom. We are not entirely free, nor are we entirely determined. But to the extent that we are alive, we make an effort to escape the restrictions of determination. This, thinks Ravaisson, is Biran's "effort" out of which arose our consciousness of self.

So much is enough to show how a fusion of elements from Aristotle, Plotinus, Biran, and Schelling formed a philosophy in which time became all-important and the differentia of life a starting point for a philosophy. That philosophy grew to unforeseen popularity in Henri Bergson (1859–1941).

The acceptance of time by Bergson has three expressions, an epistemological, a metaphysical, and an ethico-political. We shall take them up in order.

Bergson's epistemology is based upon the presupposition that radically different kinds of objects can be known only through radically different kinds of knowledge. Bergson's model of knowledge is the immediate apprehension of sensory qualities. He phrases the opposition between the immediate and the mediated as that between knowing something from without and knowing it internally. To know what another person feels would entail identifying oneself completely with that person. To listen to his expression of his feelings, even to discuss them with him, is not really to know them. If, he says, I wish to transmit to another my impression of a bit of poetry, I can through a series of interpretations approach perfect communication, but I shall never reach it. Similarly my own feeling of moving my arm is quite different from the impression which an outside observer has of it. To me it is a feeling; to him it is a material object moving through space.

Bergson is well within the tradition of empiricism when he makes these remarks. Empiricists of the classical type always laid it down as a first principle that true knowledge must approximate the condition of the immediately apprehended, in spite of the obvious fact, as Royce and Dewey pointed out, that such experiences are utterly inarticulate. Bergson is clearly pointing to two quite different experiences, feeling one's arm move and seeing someone else's move. To say that one is not the other is similar to saying that odors are not colors, that we should not attempt to smell with our eyes. Few would dispute this discovery. But some might reasonably dispute the value which Bergson gives to inner experience as if it were the paradigm of all true knowledge. Be that as it may, he calls the kind of knowledge which we have from within intuition, the kind which we have from without analysis or intellect. One would imagine that one could intuit only one's own states of mind. But Bergson makes no such restrictions. "By intuition is meant the kind of intellectual sympathy by which one places oneself within an object in order to coincide with what is unique in it and consequently inexpressible."[5] Intellectual sympathy turns out to be the intellectual intuition of Schelling and his predecessors. Presumably there is a possibility of coinciding with another person's consciousness and apprehending thereby what is inexpressible in it. But there is also presumably a possibility of coinciding with other things, and of apprehending directly their ineffable nature. For he asserts that there is a science which dispenses with symbols, translations, and representation, and that science is metaphysics.

Now if one is going to communicate knowledge one will have to use some kind of symbol, and we usually use words. The words are not what they name; that much is obvious. And Bergson, like the rest of us, resorts to words when he comes to telling what he directly apprehends. He is recognized as one of the most skillful writers in French with an acuity of introspective analysis unequaled. His account of what he observes when he turns his eyes inward runs as follows: First, "as a crust solidified on the surface," come all the external perceptions. They are clear, distinct, cut off from one another, grouping themselves to form objects. (It should be at once remarked that the metaphor of the crust is important.) Then come the memories which have been detached from the depths of his personality and drawn to the surface "by the perceptions which resemble them." Lastly he feels the stir of tendencies and motor habits, virtual actions associated with the perceptions and memories. All this he refuses to identify with himself. They are detached from himself, float off into the external world, while beneath them flows a stream of conscious states each of which "announces that which follows and contains that which precedes it." Their distinctions as separate states appear after they have passed by; as they occur they flow into one another without definite beginnings or ends. There are no definite boundaries between one moment and another but a steady flux of various qualities, progressing without interruption, headed in a definite direction. No one image can adequately communicate what is before one, for our images are drawn from external experience. Is this an adequate description or not? If it is, Bergson's epistemology is wrong; if not, the conclusion is obvious.

Like the mystic Bergson extends an invitation to his readers to perform the experiment, knowing that any description of it will be a falsification of what it is trying to describe. But it should not be forgotten that if one cannot tell what one is experiencing, one never knows whether any description is false or not. The situation is analogous to that of trying to describe a taste or odor which one has met for the first time. One attempts to find another taste or odor with which to compare it, but failing that one has to produce the experience for the person with whom one is talking. The analogy is incomplete in that one can compare the unnamed experience with the named one and it is assumed that both are odors or tastes. Consequently one can reasonably deny that the unnamed one is like the one known. But if one is having an absolutely unique experience, one cannot express it in communicable language, it is true, but just as one cannot say that such and such a statement is true of it, so one cannot say that it is false. If it is true that our duration can never "be enclosed in a conceptual representation" (*op. cit.,* 22), then there is nothing whatsoever that can be said about it. One may appreciate the importance of the experience and yet fail to see in what sense of the word it is knowledge.

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[5] *Introduction to Metaphysics,* trans. by T. E. Hulme, 1912, p. 7.

Bergson is convinced, however, that we may both know and say something true about the depths of consciousness. We must not analyze them, for that would be to arrest their flow and chop them into bits. We must not conceptualize, for there are no possible conceptions capable of embracing the unique. The uniqueness of our inner life arises out of its reflecting a whole personality (*ibid.,* 25). Presumably when we delve deeply enough we come upon something which is absolutely different from anything else in the universe, not merely in being a special and individual sample of something general, like a particular war or rose or piece of music, but in being utterly unclassifiable. This at any rate ought to be the case if we are to take Bergson's views seriously. For if there is anything common to two selves, we can abstract that something and conceptualize it. If carried out to its extreme, this theory would make any form of comment on the psyche impossible. But it is doubtful whether Bergson meant it to be carried out to that point. The uniqueness of our person lies not so much in the kind of experience we have and have had but in the special experiences which we have had and their combination. For he maintains that every feeling, "however simple it may be, contains virtually within it the whole past and present of the being experiencing it" (*ibid.).* In this sense of "unique," it is clear that no two persons ever have the same series and combinations of experience and that consequently their total experience is always different from that of anyone else. But this does not mean that what several people experience is totally incomparable. Even if one descend into the depths through psychoanalysis, and it is doubtful whether one can plunge deeper, though no two people have exactly the same repressions, fears, aspirations, blocks, nevertheless they are found to have the same kind of repressions and the like. One might continue and point out that no two specimens of oxygen are existentially identical, but they have nevertheless an identity of kind and it is that second type of identity which makes communication about them possible. If such similarity does not occur, then nothing whatsoever can be said.

Insofar as Bergson is attempting to reach a direct apprehension of the self, he is seeking an experience, much as the mystic is when he tries to reach a direct apprehension of God. This certainly cannot be ridiculed with justice. To know is better in some ways than to know about. But his great error was to think that the former could ever be a substitute for the latter. Each is a different kind of event, as he saw himself, and so different that to date no one has ever found a way of deriving one from the other. Bergson distinguishes them by means of their appropriate objects, much as Ravaisson did. The intellect is the tool made for understanding matter, space, the analyzable, the inorganic; intuition for understanding life, time, the synthetic. This looks like a radical dualism of kind but Bergson is unwilling to accept this. He believes, on what grounds he has never revealed, that reality is given to us by intuition, not by intellect. This reality is not the external world of matter but rather the flow of time itself. The reason why we do not appreciate this is that we use the intellect to understand that which is properly the subject-matter of intuition. But every time we name something, we attach to it a label which is fixed. This is unavoidable, but the fact that we use words like "time," "motion," "change," which are isolated from the flux, atomic bits of sound, counters which recur like so many pieces of matter, to name things which are flowing, does not mislead us. Bergson apparently thought it did.

The first major work in which he presented his philosophical ideas to the public was *The Immediate Data of Consciousness.*[6] In the foreword to this book he gives freedom as its main problem. We need not enter into all his arguments, since they reappeared in the *Introduction to Metaphysics.* In this work he points out that by treating consciousness as if it were a material, spatial, static thing, instead of a psychical, temporal, dynamic process, we have been convinced that the will is not free. Sciences wish to predict and to measure; but prediction cannot be applied to that which is in time, and measurement is appropriate only to the spatial. The reason

[6] *Les Données immédiates de la conscience,* first presented as a thesis for the doctorate in 1889, translated as *Time and Free Will.*

why prediction cannot be applied to real time comes out most clearly in his description of the inner ego as contrasted with the outer. The latter is the ego whose experiences are composed of external observations, colors, shapes, sounds, and the like. But we reach the inner ego by a profound introspection "which permits us to grasp our inner states as living beings, ceaselessly being formed, as states insusceptible to measurement, mutually penetrative, and whose succession in duration has nothing in common with juxtaposition in homogeneous space" (*op. cit.,* 175). But we seldom do penetrate to this level and thus we are only rarely free. For most of the time we live in the outer ego.

In a letter to Höffding, the Danish historian of philosophy, Bergson said that the central point of his doctrine was the intuition of duration, of a duration which requires no support, no substance to endure, but which is itself simply and wholly change.[7] Duration of this sort, called *la durée réelle,* is found empirically only in our inner life. But there is no reason to limit it to the life of any individual human being nor to human beings as a group. It is, on the contrary, life itself and every living being will be best understood when seen as a center of real duration. In *Creative Evolution,* Bergson sketched out the progress of life in its various forms, each of which is headed toward a particular form of knowledge. Thus the tree of life first branches into vegetable and animal life, the former of which lives in a condition of torpor, close to matter, the latter of which branches and buds, neither being pushed from behind nor attracted by a pull from in front. Animal life also splits in two, one side moving toward the most perfect development of instinct (intuition), the other toward perfected intelligence. The most intuitive of all animals are the insects and obviously men are the most intelligent. Insects such as bees and wasps and ants are known to build up perfectly operating societies without ever employing the tools of intelligence. They seem to know without reflection what should be done and they do it. Some insects provide food for their young whom they will never see. These things are done, as we say, instinctively, that is, without reflection. Where intelligence is needed, the insects are at a loss. Where intuition is needed, we men are likely to fail. Happily, we have retained some capacity for instinctive action so that sympathy with our fellows, rather than calculation, sometimes can guide us. Though Bergson believes that only intuition can give us metaphysical truth, he does not believe that it gives us the best kind of society. For the insect societies are about as purely mechanical as anything animated can well be. And he is far from admiring the mechanical. In fact, in his little book on comedy, *Le Rire,* he points out that the essence of the ridiculous is the mechanization of what is really vital. When a living being acts like a bit of matter, it causes laughter. The beehive and the anthill are societies given over entirely to routine. They should be on Bergson's theory about as comic as anything could well be.

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[7] See I. Benrubi, *Les Sources et les courants de la philosophie contemporaine en France,* 1933, Vol. II, p. 752.

Societies as a whole may be of two kinds, the open and the closed. In the latter we have a small group of human beings solidly welded together which excludes on principle all others from joining it. The open society is, on the contrary, the society of all men. This difference is a difference of kind. In a closed society pressures are brought to bear on the members from one another and a fixed routine of obligation becomes the ideal. In an open society there is an aspiration arising from intuitive sympathy which impels the group forward. It is clear that a closed society has all the earmarks of something material, spatial, fixed, whereas the open society is marked by its vitality. The former lives in space, the latter in time. In fact, the key to all of Bergson is this fundamental opposition between space and time, matter and life, numerical multiplicity and qualitative multiplicity, quantity and quality, immobility and change, necessity and spontaneity, determinism and freedom, and so on. When he maintains that real duration is more real than space, he means that it is known from within, directly, intuitively, rather than from without, indirectly, and intellectually. To appraise the former and hence its objects above the latter is based on temperament; no argument is ever advanced in defense of it. The same temperament was exhibited by Schelling and indeed Schopenhauer, and by Ravaisson, though in Schopenhauer's case the anti-intellectualism led to different conclusions. Why should we believe the ineffable experiences of intuition to reveal anything more real than intelligence reveals? If time is real, why then should space be any less real? If habit solidifies behavior, ritualizes it, turns it into a *thing,* why should we not accept this as part of our essential nature? Our inevitable lot may be to turn in the direction of matter and away from life. Our greatest good may be found in rejecting the vital, intuitive, the qualitative, the temporal and seeking the mechanical, the intellectual, the quantitative, and the spatial. These possibilities arise out of what we find when we scrutinize ourselves as we actually are and not from rejecting any part of what we are. The acceptance of time will be successful only to the extent that it does not prevent our accepting whatever other features the world manifests to our intelligence.

4. WHITEHEAD

Alfred North Whitehead (1861–1947) went farther than Bergson in integrating time into the cosmos, for instead of widening the gap between the temporal and the spatial, he bridged it. To Bergson time as real duration was a characteristic of the mental life, to Whitehead it was an essential feature of all reality. But Bergson approached the problem from the point of view of the introspective psychologist, Whitehead from that of the mathematical physicist. From that point of view everything which exists must have a temporal dimension, however brief, and if that is so then the fundamental concept of philosophy is the *event* as contrasted with the *thing*. The thing is a bit of matter which moves about in space and in time without changing its nature. The definition of the word "matter" varies, but for most philosophers before the twentieth century it was that which has attributes itself but never is an attribute, the ancient primary matter of Aristotle. After the development of relativity theory it seemed plausible that things were not in time but rather that time was in things. Bergson and of course many others had seen that the course of life is irreversible and that a living being cannot be described as so much primary matter floating through space on a temporal river. If the second law of thermodynamics is true, then even material events are irreversible and the increase of entropy would be the direction which the universe is taking. Time then becomes simply one of the dimensions of reality, not as an inner experience only but as an inalienable feature of reality. Certain conclusions follow from this beginning of which the following are the most revolutionary. (1) There are no points in space and instants of time, but only point-instants. That is, every position must be plotted at a date. (2) There are no dateless beings, except as possibilities awaiting realization. That is, an immature apple, for instance, will eventually become red; its redness is not a necessary future event, since the apple may be devoured by insects before it ripens, may be knocked off the tree, or may otherwise be prevented from achieving its normal destiny. Thus its redness, not yet realized, is a possibility but not a reality and therefore can be thought of as outside of the spatio-temporal matrix. We can think about it now; if all goes well it will appear at some future date; but we need not think of it and it need not ever appear. (3) Since time is presented to us as process, processes give us the structure of reality, and if we are going to think about things as distinguished from processes, we must do so either as cross-sections of events or as events whose rate of change is so slow that we do not notice it. An example of the former method of thinking about things is seen when we talk of people as if they had an unchanging character always present when they are present. We know that, as a matter of fact, no person has a uniform character and that his different sides show up on different occasions, and often as a reaction to other people. As an example of the second, we might cite the case of geological beings, mountains and plains, which are in a constant state of change but which to the human eye look stable. When we speak of a given person, we often stop his life at a point, cut across it, and consider him as he is then and there, forgetting that in reality he was before and will be after and is not only there but also here and elsewhere.[8]

So much for the over-all picture of Whitehead's temporalism.

At all periods of his philosophical development, Whitehead assumed that what he came to call process was "creative." This did not mean that it was not to some degree dependent upon the past; on the contrary, "the self-creative activity" must conform to whatever is "settled and actual." [9] If it must so conform, then there is as much determinism present in Whitehead as in any other physical scientist. In more normal language, the past and present determine in part the future. "In part," but not wholly. For each new event adds something to what is nearby and as the bundle of processes which make up the natural world moves on, there is constant novelty. This could occur in any system, even the most mechanical, if "novelty" were interpreted as novelty of arrangement in space. Given a finite number of material particles bumping into one another, as in the Brownian movement, there would be a very large number of patterns in accordance with which they would be distributed as time went on. There might be repetition, but exact repetitions would be very rare unless there is some reason to believe that every possibility must be realized. But for Whitehead novelty is not simply novelty of pattern. There must be qualitative change and obviously if qualitative change is to be continuous, the novelty which appears in the self-creative activity must never be a repetition of the past. But why self-creative? As we have had occasion to remark elsewhere in this book, whether a process is called self-determined or accidental makes little difference except for the emotional overtones of our words. Furthermore, we are always going to land in two self-determined—or accidental—sets of events: (1) the brute facts with which we begin and (2) whatever we choose to call the universe as a whole. The former can never be explained since they are that which is supposed to explain everything else; the latter can never be predicted since all prediction is based upon repetitions and the whole can never be repeated. The exact future state of a particular event is because of its particularity unpredictable. One can predict what the future of a class of events will be but as soon as a particular is absorbed into a group, it loses its particularity. Thus we can predict that we all shall die. But to predict what any one of us will die of or when he will die is impossible except within such margins of error as to be silly.[10] Consequently, since there is no way of determining what causes the future of an event to be what it is going to be, Whitehead calls it self-creative. It is a question whether he ever gave a clear idea of what he meant by the self which was creative.

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[8] For an excellent treatment of Whitehead's theory of time, see William W. Hammerschmidt's *Whitehead's Philosophy of Time,* 1947.

[9] *Symbolism, its Meaning and Effect,* 1928, p. 43.

Creativity according to Whitehead was an indefinable. There can be no process which is not creative and presumably creativity is a feature of all processes. If every process is an individual event, then within the event there is no foretelling its future. But why does Whitehead prefer to call the general nature of all change creative rather than indeterminate? The only answer which I have been able to fabricate is that he, like Bergson, was infatuated with the idea of vitality, creativity, and experience. In theology creation has always meant production out of nothing. But Whitehead is far from believing that the future of an event or "actual occasion," as he came to call events, came out of nothing. On the contrary, if the activity of a process must in part conform to the actual and the settled, what exists now must have some influence on what is coming into being. Again, since he believes that there are certain beings which he calls eternal objects, qualities which have no temporal dimension, which limit to some extent the possible characters of future events, creation must always operate within the limits of the actual and settled and those of the eternal objects. Thus process may be creative in the sense that its future is not entirely determined by its past, but it is not creative in the sense that its creations are unlimited in kind.

The eternal objects are a strange factor in a philosophy which lays such emphasis upon time. Examples of them are the sensory qualities. They are timeless in that (a) they can linger within an experience without internal change; that is, a color is whatever it is no matter how long it is before one. (b) They can recur as exactly the same qualities which they had been previously seen to be. A real event is unique and never recurs. The eternal objects are whatever is named by our common nouns and adjectives, in other words the universals of medieval thinkers. If there were no such beings, it has been said, our common nouns and adjectives would always be misleading and sometimes downright wrong. But when we see a patch of blue, its blueness, it is said, must be self-identical wherever it occurs; otherwise it would be false to say that any two objects ever had the same color. But in at least one of his works, *Science and the Modern World* (1926), eternal objects are possibilities of actualities. If he means that all actualities are the realization of eternal objects, then the future is pretty narrowly enclosed and one wonders all the more why he ever called process creative. It might more properly be called selective. Had Whitehead been a bit more aware of the history of philosophy he might have seen that the notion of the limitations on what can be realized is the old medieval notion of the *compossibles.* As Leibniz had shown, one must not limit one's inquiries into what is possible, but one also should look into what qualities can exist together, what are compossible. We know intuitively that a physical object cannot be both round and square at the same time but that it can be red and square. Redness and squareness are compossible, roundness and squareness are not. But this is known not through any immediate awareness or perception of the unreality of incompossibles, for one cannot be aware of things which do not exist. Our knowledge comes from our use of the law of contradiction, whatever that may be founded upon in experience. If someone should say to us, "Julius Caesar in 50 B.C. was both bald and covered with a fine head of hair," we should know that the statement could not be literally true as soon as we knew the meaning of the words "bald" and "covered with a fine head of hair." If the eternal objects are to limit the possibilities of the future, they must operate according to some formula involving compossibles as well as by the intrinsic natures of each one of them. If there are only seven colors, then we can say that the future will never show an eighth. But whether the future will be red, green, yellow, or some other named color will never be revealed by the fact that there are seven spectral colors.

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[10] For example, if life-expectancy of American males is 65 after the age of five, we can bet that any of us over the age of five will live to be 65. But though that is a sound bet, as a prediction it is pretty loose. Again, if we know what the possible diseases are which can befall a man and kill him, we can also predict that he will die of one of those diseases. In other words it is safe to predict that a man will die *of something,* but not of what.

In Bergson the future is open, undetermined in any way whatsoever. In Whitehead, although he uses terms which would lead one to believe that he too believes in an open future, it is clear that he is too thoroughly indoctrinated with physical science to neglect causation. As a matter of fact he tries to substantiate our idea of productive causes by the experience of producing effects. We feel ourselves to be causal. This is supposed to be his reply to Hume.[11] But it would seem strange that any feeling of anything which is dated and located could be the ground of a general law, though it might well be an exemplification of one. To set up a general explanatory principle on the basis of any individual feelings would seem to be impossible, at least to the author of these lines. That is not, however, the way Whitehead and his admirers envision the matter. They appear to believe that unless our concepts reflect our immediate experiences, they are worthless. That Whitehead does not take this seriously appears in such a theory as that of abstractive sets. The whole technique of defining an abstractive set is certainly not given in an immediate apprehension. Readers of Whitehead will recall that he defines it as a set of regions in which "(1) any two members are such that one of them includes the other non-tangentially, (2) there is no region included in every member of the set."[12] This is an extremely adroit piece of work on Whitehead's part, for the relation of inclusion and its converse, being-included-by, do indeed have analogues in feeling. No such ideas as those of points, lines, solids, are needed. But from whence does the technique of extensive abstraction itself come? If from daily experience, ought it not to have been discovered centuries ago? We have all seen boxes enclosing other boxes and being enclosed in still larger ones, but none of us has seen this process continued to infinity and none of us ever shall.[13] One need have no objection to extrapolation as a process of mathematical construction, but its justification hardly is to be found in perceptual experience.

The probability is that here again Whitehead was inhibited by his scientific training from limiting his metaphysics to what could be gleaned from bare experience. He knew that no science can be rounded out by the accumulation of data, facts alone. Some principles of organization must always come into operation and these principles, even when they are simply the rules of logical thinking, do limit what we can reasonably imagine. If the eternal objects plus the past and actual set of facts determine the present and future, so eventually, he admits, there must be some ground of limitation in any field of human thinking. Otherwise anything would be possible and anything is not possible. In the long run this ground is God, the Principle of Concretion. Why this should be identified with

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[11] See Victor Lowe, "Whitehead's Philosophy of Science," in *Whitehead and the Modern World,* 1950, p. 33. Cf. Whitehead's *Process and Reality,* p. 267.

[12] *Process and Reality,* p. 421.

[13] It would be interesting to make a close comparison of it and Royce's conception of a self-representative series.

Jehovah, Allah, Brahma, Father in Heaven, First Cause, Supreme Being, and Chance,[14] I have failed to discover. But it is presumably edifying to call whatever first principles one erects by some noble name, and Whitehead does not fail to do so. Should one call the law of contradiction God? Should one call the dictum *ex nihilo nihil* or the equally celebrated dictum, Nature does nothing in vain, God? Few nowadays will say so. But each is an ultimate principle playing precisely the same sort of role as Whitehead's Principle of Concretion. Time for Whitehead may be real, in fact the one character of the real which is omnipresent. But as in Aristotle Necessity held the two ends of the world in tight and unyielding bonds, so in Whitehead the eternal objects, the ultimate and inexplicable Principle of Concretion and the accumulated actualizations of the past, all constrict the course of future time. Just what room there is for creation and novelty is doubtful. All creation takes place, it is true, within limits. One cannot create anything out of anything for any purpose. But the restrictions need not be ultimate and binding on all change, but each type of process may have its own which are not to be systematized into a hierarchy of more and more inclusive limitations. Thus the law of contradiction may be binding on rational thought; it is obviously irrelevant to the structure of dreams. Nor can one say that because rational thinking and dreaming both proceed according to rules which are presumably discoverable, both are to be included in something called a Principle of Regulation. One might as well argue that since fishes swim, birds fly, and quadrupeds walk, there is a Principle of Transportation at work from which the specific modes of transportation can be deduced.

Whitehead believed that he had nullified the "bifurcation of nature," by denying that minds and bodies are two in kind. But in spite of his enthusiasm for organic wholes, there is quite as much multiplicity in his system as ever was to be found in Descartes or Locke. No philosopher has yet explained away the fundamental difference between rules, laws, methodological or syntactical principles and that which they regulate. If one believes in ultimate grounds so universal in scope as to be the support of all reality, then there is a genuine bifurcation between the ultimate and the proximate. Though Whitehead insisted that all reality was process, he did introduce eternal objects which manifested no process. Though he maintained that all events were particulars, his eternal objects were universals, so that in effect the traditional distinction between the universal and the particular was retained in his writings. A survey of even the few philosophers who are discussed in this book leads one to think that monisms of either substance or structure are doomed to failure and that the distinction of substance and structure is probably superficial. But we have one more theme to expound before we draw any conclusions. That theme is existentialism.

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[14] *Science and the Modern World,* p. 257.

CHAPTER 21

The Rise of Existentialism

One might have thought that a century which had seen the triumph of natural science would have induced in western minds a complacent rationalism. We have seen physics become mathematics, chemistry become physics, biology become biochemistry, and psychology turn into biology. The dream of Comte to develop a science of sociology has almost been accomplished through the skillful use of statistics and though most of our scientific knowledge has been put to the destruction of large numbers of our fellow men, that was certainly not the fault of science. Yet ever since the beginning of the twentieth century there has been growing dissatisfaction with rationalism. It is always difficult, if possible, to attribute to any one cause shifts in intellectual history, but surely a large part of the credit or blame for our turning away from purely rational techniques may be given to the following: the various forms of psychoanalysis which showed the influence of nonrational factors in reason; the growing influence of Marxianism which emphasized the contributions of economic interests to reason; the development of non-Euclidean geometries which destroyed men's faith in self-evident premises; the investigations into many-valued logics; conclusions reached by certain logicians that formal logic deals only with tautologies; the popularity of the various forms of anti-intellectualism which were based on religious yearnings; and the spectacle of the whole world turning to international civil war as a solution for problems the meaning of which was so obscure that each nation seemed to believe sincerely that it was fighting in self-defense.

If we omit the psychological, economic, and religious factors—and we do so at the peril of making our comment trivial—we can see that there remains a logical basis for dissatisfaction with rationalism as a solution to all human problems. The most important logical element in the revolt against reason is the impossibility of equating the prior and the posterior. If time did not have a direction, this would not be so bad, but the direction is there and though many ingenious attempts have been made to explain it away, so far none has been generally accepted. Wherever there is a direction, there is always the possibility of prediction and also of control, and there is nothing irrational in the situation except that no equation can be set up in which the later event will be the exact equal of the earlier. Vectorial analysis may be expressed as an equation, just as chemical analysis is. But that does not mean that what is on the right hand side of the equation is entirely present somehow or other on the left.

In the second place, perhaps because of the influence of statistics, deviations within a statistical group are more noticeable than they used to be. The variations within a biological species were utilized as early as Lamarck and, as we have said previously, formed one of the important bits of evidence in Darwin's argument toward natural selection. In any event attention began to be paid to the individual thing within a class rather than to the class itself. The animal who, for instance, varied from the norm in a favorable manner had a better chance of surviving than the animal who varied in an unfavorable manner. The genius, the idiot, the man of average intelligence all began to attract attention and to induce scepticism about classifications as keys to complete understanding. This appeared early in the arts when, thanks to certain "romantic" artists and theorists, each work of art, each artist, and presumably each critic was to be appraised as an individual thing. But individuals cannot be handled through pure logic, except when they are members of unit classes. Their *haecceitas* (see page 286 above) could be manipulated perhaps as a class-concept, but since the class had but one member, one might as well stop fiddling with logic and observe. Individual things must be looked at, intuited, apprehended through observation and can be talked of only in terms which approximate their uniqueness, that is, only in terms which express those details in which they resemble other things. But they resemble nothing in their individuality by definition. Hence they are logical surds. It is worth pointing out that there was an element in the Hebraic-Christian religion which brought men face to face with the same problem. I refer to individual responsibility for one's acts. If each soul is not merely existentially one but to some degree qualitatively one also, then at least two consequences seem to follow. (1) The responsibility as well as the freedom of the individual is a surd, if it depends upon the uniqueness of the individual, and there is no general law which will tell us what John Doe will do in a given situation. (2) No rationally grounded commandments can be applied to all men individually. A law, either descriptive or regulative, becomes reasonable insofar as the persons involved are alike. No one ever pretended that cretins could be expected either to obey the Ten Commandments or to exhibit those traits which descriptions of normal men and women exhibit. One may say, To the extent that John Doe is a man, he should act in such and such a manner. But after all, insofar as John Doe is John Doe, he is more or less than a man, and it is precisely that fringe of difference which will make a strict application of the law impossible.

Not only is an individual a-logical, but so too is existence. This had been known for centuries, but it had also been believed that logical orders were a reflection of existential orders. The laws of thought were supposed to be somehow or other laws of things and the distinction between logic and ontology was pretty faint. But men were apparently so impressed with the beauty and purity of logic that they seemed to feel a preference for logic rather than existence. If the world did not obey what logic said to it, that was the world's fault. And with that passion for praising and blaming the universe which all philosophers show on the slightest provocation, they were more likely to turn away from fact to theory as required by the exigencies of their thinking. Yet when the time came that experimental science convinced men that the world was going to proceed on its own course regardless of the strictures of theory, they began to accept existence as inevitable. But like the individual, existence is a surd. Nothing ought to exist, but many things do. This obvious statement contains grounds for despair or rejoicing according to temperament. There is a grain of comedy in a situation in which the real eludes the grasp of the philosopher who continues to reach for it. Philosophy is a child striving to hold water in its fist.

If the existent individual living in time cannot be grasped by the reason, the philosopher can flee from time and existence or can look for some other way of apprehending the real. Instead of speaking of knowing the existent, he will wake up to the fact that he is confronted with it. It is there before he can say anything whatsoever about it and it remains there to plague him even after he writes *Finis* to his book about it. This confrontation with existence, with all its terrors, its mystery, its refusal to be understood, its challenge to action, becomes the primitive fact of experience. The traditional way of envisioning man and the world had been that of contemplation, with the data of experience simply sensory components of declarative judgments. But if the world is a collection of individual things and events, the simple declarative judgment must be abandoned since one never knows what is before one. It is no more a matter of identification (*This is an apple*) than it is a matter of doubt (*What is this?*). It may be a cause of fright (*What will happen if I eat this?*) or a symbol of man's fall from grace. The individual is in a state of emotion as well as of sensation, of curiosity, bewilderment, hope, despair, joy, and so on, and all these elements of experience must be considered when reality is considered. The datum of experience becomes invested with an aura of emotional relevance which neither the Lockean nor the Cartesian tradition was willing to recognize.

1. Kierkegaard

It was something of this sort which was the starting point of a philosopher who only recently has become influential, S. A. Kierkegaard (1813–55).[1] He saw early in his career as a theological student that sooner or later even the most stubborn rationalist makes a choice and that his choice is itself nonrational. It is made on the basis of what Professor Paul Tillich has called his ultimate concern.[2] But who can foretell the ultimate concern of others? Where Descartes knew for a certainty that he was a thinking being, Kierkegaard knew for a certainty that the solution of conflicting claims could not be reached by the geometrical method. He was in Pascal's position, suspended between reason and faith. The only way out of the situation was to jump to a conclusion and to jump to that conclusion which was the most perfect expression of one's own needs.

But it is not only faith and reason that are in conflict. Similar conflicts exist between the ethical and the aesthetic, the good and the beautiful; between the human and the divine, man's desires and conformity to God's will; the individual and the universal, that which exists and that which is possible. Reason alone is incapable of settling such problems since they arise because of the attempt to apply the reason to the existent. One might just as well attempt to harmonize the claims of Kant's Pure Reason and his Practical Reason as to attempt to harmonize fact and value, what is and what ought to be. Reason demands universals; experience gives us only particulars. Reason demands a metaphysical God; faith gives us a religious God. One could of course choose reason as against experience, but that would mean lopping off a major part of our lives. Kierkegaard was one to insist that the whole person, the rational, the emotional, the sensitive, the volitional, be treated as a unit and that if this meant, as it did, irrationality, then irrationality was to be accepted. The acceptance of irrationality is the acceptance of the absurd. And in the field of the absurd will be found all that is individual, human, and aesthetic. The incarnation is absurd, but, like Tertullian, Kierkegaard sees no need for denying it. Love is absurd, but the whole human race yields to it. "The movement of faith must always be performed by virtue of the absurd, and—this is important—in such a way that the things of the world are not lost but entirely regained." [3] Faith is not needed when reason points the way and reason stops short this side of existence.

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[1] Though most people interested in philosophy know more or less about Kierkegaard, those who do not will find *A Kierkegaard Anthology*, ed. by Robert Bretall, Princeton, 1947, an excellent introduction.

[2] Quoted in the Introduction to the *Anthology*, p. xxi.

But the Christianity of Kierkegaard demands a second type of absurdity, the absurdity of mysteries. Just as we sacrifice our reason to existence, so we sacrifice it to the supernatural and for the satisfaction of precisely the same needs. The rejection of the particular in order to find the universal is a scientific gesture demanded by the nature of science. This gesture is necessary if we are going to understand the world; but it is an abandonment of the real for the sake of the possible. So in religion we sacrifice to the universal. The story of Abraham and the Sacrifice of Isaac illustrates this. To Kierkegaard the sacrifice of Isaac is the sacrifice of that which is dearest in life for the sake of obedience to the eternal. That God the father of all mankind should demand the sacrifice of a man is rationally incomprehensible, though traditionally it is held to have prefigured the Crucifixion. But Kierkegaard is careful to point out that the greatness of the story is not Abraham's willingness to sacrifice his dearest possession (*op. cit.*, 31). What is usually left out of the Story, he says, is dread. Dread arises out of the conflict between "the ethical expression of Abraham's action," his desire to murder Isaac, and "the religious expression," that he wished to sacrifice him. Murder and sacrifice cannot be reconciled or synthesized; outwardly a single act may be one or the other, inwardly they are always discordant. This is the central paradox of the situation (*ibid.*, 39). When confronted with that paradox the man of faith "plunges into the absurd," and it is that plunge which Sartre in our own time was to call commitment. Whether one has the religious interests of Kierkegaard or not, the moment is bound to come at which the plunge will have to be made. For whenever action is required, we are confronted with the absurd. In the case of Abraham, "there could be no question of human calculation, and the absurdity lay precisely in the fact that God demanded it [the sacrifice] of him one moment and recalled the demand the next" (*ibid.,* 43).

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[3] *Fear and Trembling*, trans. by Robert Payne, 1939, p. 47.

In his *Problemata,* which follow the *Preliminary Expectoration,* Abraham is contrasted with the typical tragic hero, in that the latter acts within the domain of morality. Agamemnon, Jephthah, Brutus the Elder, all are called upon to sacrifice their children, and they answer the call. In Abraham's case the end is beyond ethics. The tragic hero can be integrated into an ethical scheme; one can point to universal moral laws of which their acts are an exemplification. But Abraham went beyond the universal law. "There was no question of saving a nation, or of defending the idea of the state, or of appeasing the anger of the gods" (*ibid.,* 83 f.). His act was a purely personal act, a private undertaking. There can be no universal law which dictates private undertakings. Therefore what Abraham did is unintelligible in rational terms. He cannot express even to himself the sense of his act. He is therefore in a situation which is terrifying. For he might be mistaken and yet he continues on his way. The fundamental horror arises over the absurdity of the problem and of the solution. This is what Kierkegaard meant by the "suspension of teleology."

The suspension of teleology is the acknowledgment that a man is confronted by existence which is in itself meaningless, that he must act as if he understood what is required of him and yet there is no way of making the requirement intelligible. This is a revivification of an element in Christianity which has often been overlooked but which has never been entirely abandoned. It makes its appearance in the doctrine of the Incarnation, as Tertullian saw, of Vicarious Atonement and of Inherited Guilt. It appears again in the search for martyrdom and in the monastic vows of Chastity, Obedience, and Poverty. No clearer expression of it could be discovered than St. Francis's definition of perfect joy, seeking and finding unmerited punishment. The Christian philosophers of the Middle Ages as well as those of modern times attempted to interpret such things rationally but, after Pascal, Kierkegaard is the first philosopher to accept existence and the problems it poses. If he went unrecognized for so many years, it was perhaps attributable to the desire of Christians to reconcile their beliefs with science. Kierkegaard turned against science.

2. JASPERS

In 1913 Erich Frank, a young instructor in the gymnasium at Heidelberg, came upon the writings of Kierkegaard. The impression the Danish philosopher made upon him was profound. He introduced him to his friend Karl Jaspers, and in notes to a lecture on existentialism, as yet unpublished, he wrote, "Jaspers caught fire at once. It was in this discussion that the movement of existentialism was started." [4]

The outcome of Jasper's meditations is to be found in a short book which he wrote called *The Way to Wisdom*.[5] The task of philosophy in that work is differentiated from that of science as intuitive wisdom is differentiated from rational investigation. Certain problems inevitably arise in the mind of man, and though he never comes upon a final answer to them, he persistently raises them at all stages of his life and in all levels of culture. For man by nature longs to "find reality in the primal source," to apprehend it in his inner acts, "to open man to the Comprehensive in all its scope," to communicate what has been found to his fellows, and to "sustain the vigilance of reason in the presence of failure and of that which seems alien to it" (*op. cit.*, 13 f.). Regardless of the precise meaning of such terms "the primal source of reality," "inner acts," "the Comprehensive," one feature of these phrases immediately commands attention: philosophy to Jaspers is a way of living; it is not a purely intellectual discipline. It is in fact an expression of that which is most human, for he believes all men to be instinctively philosophical as soon as they are aware of their humanity. It is an essential part of man's nature to wonder about the natural order, its origin and destiny. No practical good will come of this, but the man without wonder is more of a beast than a man. In the second place, man is never completely satisfied by his knowledge. Satisfaction—and here there is a curious similarity between Jaspers and the pragmatists—is always followed by doubt. Certainty is never enduring. Third, philosophy is self-forgetfulness. As we strive to settle our doubts, we turn away from ourselves and become "immersed in things." Wonder, doubt, self-forgetfulness become the differentiae of philosophizing. But the ultimate truth which this leads to is the sharp awareness of certain limits within the human situation which can never be transcended. We die, we suffer, we struggle, we are subject to chance, we become inexorably involved in guilt (*ibid.,* 20). These ultimates must be either accepted or evaded. They can never be explained away.

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[4] See an essay on *Erich Frank's Work* by Ludwig Edelstein, p. 419 of *Wissen, Wollen, Glauben,* by Erich Frank, Zurich, 1955. Readers of German will find Frank's essay on Jaspers, p. 269 of the same volume, of greatest value.

[5] This book is composed of twelve radio broadcasts given in 1949.

Each of these limiting situations comes from the sudden awakening to a fact. That we die would be impossible if we did not live in time. That we suffer would be impossible if we were purely material souls capable of action but incapable of being acted upon. That we are subject to chance would be impossible if the cosmos were utterly rational and hence determined. And guilt arises out of our individuality which makes it impossible for temporal man to live according to eternal principles. For similar reasons Jaspers rejects science as the clue to reality. Science, he says,[6] can deal only with "objects in the world." By its very nature it cannot seize the whole of Being. Knowledge of the whole will be adumbrated in myth, poetry, and the other arts, and will seek full expression as what is implied in being human. What Jaspers is objecting to here is the attempt at giving a complete picture of the world on the basis of incomplete reports. His justification, he thinks, is found in the traditional way of considering knowledge as the absorption of truth as by a blotter, whereas human nature itself contributes something to what is observed. He is thus protesting against such philosophies as materialism or spiritualism which try to express everything in terms of some class of things, philosophies which might be called reductive. Thus Berkeley might be said to reduce the material world to a set of ideas and d'Holbach to reduce the mental world to a set of material things. The reduction is always bankrupt before it proceeds very far because neither philosopher ever saw the interplay between subject and object but forgot that "subject and object belong to each other" (*ibid.,* 35). The tendency to philosophize in this manner Jaspers attributes to "the urge to be freed from freedom" (*ibid.,* 36). The real human being is a person, an individual, not a specimen.

Like all existentialists Jaspers recognizes the impossibility of knowing the individual in scientific terms. But even when we cannot know something, we can know why such knowledge is impossible. The square of the circle is not a meaningless phrase, but we know that we cannot calculate it precisely and we know why. We know why we shall never discover a velocity greater than that of light. We know that if everything in the world were doubled in size, we should never be able to discover the fact and we also know why. Consequently, there is nothing fallacious in arguing rationally to the limits of rationality. Now Jaspers unfortunately calls the tool of philosophy by the sacred name of Reason. But his Reason is not the Reason of the natural scientist. It is a way of reaching complete unity, and upon examination it turns out that the only way of reaching unity is by becoming unity. But the unity which we may attain is never complete for the simple reason that we are temporal beings. We know that whatever truth we may achieve must be communicable and yet communication is never ended. It is, the words are mine not Jaspers', a continuing dialogue between finite minds seeking to comprehend the infinity of possibilities. Final truth, he says *(ibid.,* 43) can be found only in that which transcends all becoming, that is, Being. That Being is beyond Becoming is, to be sure, no more self-evident than its obverse, namely, that Becoming is beyond Being. It is no more self-evident, for that matter, than that nothing whatsoever is beyond or above or below Becoming. Becoming may well be, as in Bergson, the ultimate, to be grasped as it and we too change, on the wing. But Jaspers would find such suggestions revolting. To him the Eleatic One, the Eternal, the Immutable, must be somehow or other the "ground" of the Heraclitean Many, Temporal, and Changing. Reason which leads us out of history to Eternity is the Reason of philosophers like Schelling who by the manipulation of dialectic were able to construct, at least to their own satisfaction, worlds which would fit their longings for security. Yet he also realizes that when we reach the ultimate unity, we are unable to say anything about it. For we are condemned to talk in "historical forms" or in metaphors when we try to express that which is beyond history.

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[6] In *Reason and Anti-Reason in our Time,* trans. by Stanley Godman, London, 1952, p. 34.

Though philosophy is an expression of that which is human in human beings, yet it does not occur automatically in anyone's life. Even the child who raises metaphysical questions without being aware of what he is doing, is brought up with a shock to rejecting the obvious. When he asks his parents, "Who made me?" he is suddenly confronted with the possibility that he had a beginning in time. But it is not inevitable that such a question rise to his lips. One comes up against a break in the current of existence. One makes a decision at that moment to raise a question, a free decision. "One can call it the Unnatural as opposed to the 'innocence of nature' " (*ibid.,* 53). It is the assumption of responsibility and consequently of guilt. And therein occurs a rebirth, or at least the rise of a new personality. We leap—here we have a Kierkegaardian strain—out of existence into Being. And this leap will be made when a man suddenly awakes to the fact that he is more than a specimen of an abstract class, that he is a real and unique individual.

When that happens he knows that what he does is not entirely determined by the course of history, that he contributes something, if not everything, to the events in which he participates. His freedom may terrify him—though one could imagine a society in which responsibility might be encouraged—but in that case, as in that of Abraham, the terror is an integral part of the situation.

To pass beyond existence to Being is obviously to deny ultimate reality to the temporal. The one link between existentialists like Sartre and Jaspers, as I hope to show, is their common emphasis upon the individual man and what is involved in his individuality. But once existence is grounded in Being, it loses ultimacy and instead of being the solution of a problem, becomes a problem in itself. It may have been for this reason that Jaspers in his later years preferred to call his philosophy the Philosophy of Reason rather than Existentialism (*ibid.,* 63).[7]

In his series of radio lectures, Jaspers had clarified his basic ideas when he came to expound briefly his thoughts about "the Comprehensive" (*op. cit.,* 33). The Comprehensive may be conceived in various ways: (1) as being itself, in which case it is called transcendence (God), and is contrasted with the world; (2) when thought of in terms of the subject-object relation, it may be (a) consciousness in terms of which we are all identical; (b) *Dasein,* presence, in terms of which we are particular individuals; (c) existence, in terms of which "we are authentically ourselves in our historicity." Existence is differentiated from presence (*Dasein*) in that it has a temporal dimension. When one is confronted with an object, even if that object is one's inner life, one is simply aware of something there, not of its origins or future. When we are merely conscious, we pass through a moment in which we have no consciousness of our personality, of our selves as distinct from other things. This is as neutral as awareness can be, but the moment is never self-sustaining and we soon either become aware of objects or of ourselves as existence. Yet each of these is an abstraction from the whole situation and we have no way of synthesizing them into a unity which can then be presented in communication. For communication always operates, according to Jaspers, in terms of the subject-object dichotomy, and only the mystic is able to participate in the nature of the Comprehensive. To him immersion in God's being is an awakening; "life in the body" is a sleep.

If this is the solution of our problem, then the only existence which is of any importance is Being as transcendent. And the only knowledge which is of ultimate value is the Beatific Vision. For as soon as we talk of kinds of being or of beings, we have implicitly split up the Comprehensive and have begun to talk in terms of subject and object. But Jaspers seems unaware that the very idea of Being in itself is abstracted from the copula in a subject-predicate judgment where it means no more in isolation than such a word as *above* or *below*. When we use the verb *to be* without a predicate, we usually mean by it nothing more than *to exist*. And in both Greek, from which the notion of Being was derived, and English the meaning of existence is common when the word to name it is *to be*. The question of whether Being or Pure Being or Being-as-Being means anything whatsoever, if it does not mean existence, cannot be decided dogmatically. But the present writer can find no meaning in it. To speak of Being, when one does not mean Existence, seems to him like speaking of fatherhood without fathers and sons, abovenesss that is above nothing, equality which subsists between no terms. One cannot plunge into pure Being until one knows wherein one is plunging, but the moment one indicates its nature, one has particularized.

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[7] Cf. P. Tillich, *The Courage to Be,* New Haven, 1952, p. 150.

Dialectically one can speak of Being as the name for everything of which we may speak. And that would seem to be the meaning of Jaspers' Comprehensive. This would include unreal as well as real things, imaginary things as well as experienced things, Nonbeing, I suppose, as well as Being. But to be a possible subject of conversation is not to share a property with anything else unless we are willing to assert, for instance, that inedible and edible things, visible and invisible things, possible and impossible things, and so on all have a common property. "To be" is used, as Santayana pointed out some years ago,[8] in four different senses: (1) as identity, (2) as equivalence, (3) as definition, (4) as predication. If, then, Being is to have a homogeneous denotation, one must first prove that all four meanings contain a common meaning. If that is not done, then all talk about Being as such runs into the danger of becoming philosophical punning. To fuse the four meanings into one is analogous to fusing the meanings of homonyms into one. If we did not have writing or printing, we might confuse *meat* and *meet* since they both sound alike and insist that there must be *meathood* to be found in *meethood* and *meethood* to be found in *meathood*. This seems unprofitable. For such reasons anti-existentialists have protested against assuming that there must be a common meaning to the verb "to be."

Such protests have been unavailing however. Kierkegaard and his Christian disciples, both Catholic and Protestant, have put their finger on a weakness of traditional philosophy. They have insisted that man's place in the universe is not merely that of a perceptive animal whose mind is composed of sensory data, passively received and automatically erected into images, concepts, and all the other possessions of the soul. They have substituted for the elementary and primordial sensations of Locke and Condillac a more complete vital situation with all the shock of confronting a problem, of trying to discover significances, of wondering what to do or whether to do anything, a situation in which knowledge is only one factor. A pragmatist such as Dewey had moved in this direction when he insisted that knowledge began with the perception of a problem, but it is doubtful whether he saw the complexity of problems. Royce had a clearer view of the matter when he added to perception and conception the process of interpretation, but Royce failed to see the religious, ethical, and aesthetic motives which might introduce meanings into signs which had not been historically associated with them. Both Kierkegaard and Jaspers accentuated the ethical and religious aspects of the situation, but there was always the possibility that other impulses would intervene and did in fact intervene. These impulses were brought to the fore by both Marxianism and psychoanalysis, and the third type of existentialism, that of Sartre, played upon them.

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[8] "Some Meanings of the Word 'Is'," *Journal of Philosophy*, XXI (1924), 365.

3. Sartre

In the technical language of Jaspers, the weakness of traditional philosophy is the split which it introduces into knowledge by considering only the object or content of knowledge or by considering only the subject or the forms of thought.[9] In reality subject and object are said to form a unit which has a comprehensive nature. Since it is neither subject nor object, and since we are limited to knowing one or the other, Jaspers gives it the name of the Comprehensive or Inclusive about which nothing more can be said than that it is. This does not in his mind mean that the Comprehensive is the sum total of all subjects and objects, but that it has a nature of its own, lies behind all subjects and objects, is in fact much like Spencer's Unknowable. Jaspers' Comprehensive, though it cannot be known in the ordinary way of perception and conception, can apparently be intuited in moments of dread, of anxiety, of guilt, for all philosophies contain intimations of its presence behind the scenes.

It would not be necessary to posit any Comprehensive if Jaspers had been willing to accept phenomena as what they are, appearances which are appearances of nothing. The suspicion will always arise in the mind of a critical reader that such reasoning as his is playing upon words. When he says that the object exists only for a subject, he seems to be arguing that since the word "object" was invented to denote that which is presented to a subject, we must continue to mean this whenever we use the word.[10] Subjects are clearly not everything in the world and neither are objects. But neither are odd nor even numbers all the numbers that exist. Yet the odd and the even numbers all together exhaust the integers and one does not have to posit *numerality* behind or above the integers in order for some of them to be odd and some even. Jaspers is probably resorting to the honored tradition of substantialism when he reasons as he does. There must be some substance which now is subject, now object, otherwise the unity of being would be lost.

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[9] Though this is a constant theme running throughout his works, one will find a clear presentation of the matter in *The Perennial Scope of Philosophy*, trans. by Ralph Manheim, 1949, p. 8.

When we come to J. P. Sartre, the situation is quite different. He too accepts as his beginning the individual confronted with a world which is not himself. The individual recognizes his alienation from this world, recognizes that it is utterly different from him, that it exists out there to be apprehended and, it is hoped, understood. The opening page of his major work, *L'Etre et le Néant,* flatly denies the distinction between inner and outer natures. "The appearances of the existent are neither internal nor external; they are all on an equal footing; they all refer to other appearances and none of them is privileged." There is nothing behind them. Being and Appearance thus becomes by fiat a distinction which no longer will be accepted. All appearances together form the realm of Being and the very nature of Being is to be an appearance. But though there is nothing behind the appearances, there is something in front of them, the person to whom they appear. This person is in a state of continual change, for he exists in time. This implies an infinity of appearances and a finitude of subjects. For, as Sartre argues in this work, each subject, since it is in a state of change, may select a variety of objects seen from a variety of points of view; phenomena also reappear which would be impossible if they were limited in number. The dualism of subject and object has disappeared but, as Sartre himself points out, the dualism of finite and infinite has been substituted for it. This new dualism can be expressed as that of the appearances within any one person's experience and the totality of all possible appearances. *L'Etre et le Néant* is an attempt to discover what the appearances are.

This problem reduces to that of expelling the appearances from consciousness where they had been lodged since the time of Berkeley. Sartre maintains that no appearance is in the mind; the mind is not a receptacle. Appearances are wherever they may happen to be. The appearance of a table is in space. One's idea of the table is quite another thing. Consciousness *of* things is projected outward toward the appearances. Our distinction between ideas and that of which they are ideas can be based only on our consciousness that we are entertaining ideas. To see a table and to be aware that we are seeing a table are two different events, the latter of which is distinguished from the former only by self-consciousness. But this does not mean that there is an infinite series of awareness of awareness. On the contrary, self-consciousness is not a duality of self and consciousness of self; self-consciousness arises in the very act of being conscious. That is why Sartre puts the *de* in the phrase *conscience de soi* (awareness of self) in quotation marks. The *of* is required by French grammatical usage, but it corresponds to nothing in the realm of fact. Self-consciousness is the only manner in which there can be consciousness of anything.[11] When we experience, for instance, pleasure, there is no consciousness of pleasure, plus pleasure; there is just pleasure which is conscious. But in the same way one can argue that our consciousness of pleasure determines pleasure. Sartre is trying to avoid a self empty of experience which is anterior to its experiences and acquires them or constitutes them. When we are conscious of pleasure, both consciousness and pleasure must be present but neither is constitutive of the other. Consciousness exists in itself and by itself as far as anyone who is being conscious knows. We emerge out of sleep in waking life and discover that we are conscious. We do not produce this consciousness, cause it, generate it, as far as we know. We simply are conscious. That fact is an ultimate.

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[10] This is historically inaccurate but harmless.

We are now individual minds confronted with phenomena which are "out there" but represent nothing but themselves. We can thus justify all affirmative judgments, judgments that declare the existence—or being—of something, but what do we do about negative judgments? Are we to find some way of discovering "objective" nonbeing? For Sartre negation or nonbeing always occurs within the limits of human expectation. A man judges that he has a certain sum of money in his wallet; he opens it and finds he has three dollars less than he thought he had. Can one say that the three dollars in question exist in a realm of nonbeing? On the contrary, it is because we

[11] There is a certain irony in the fact that psychologists who on most counts would have bitterly opposed Sartre, James Ward in England and Mary W. Calkins in the United States, would have been in complete agreement with him on this point.

expect to find, let us say, ten dollars and find only seven, that we can say, "We have three dollars less than we thought we had." Negation arises only in the relation between man and the world. "The world reveals its non-beings only to him who first posited them as possibilities" (*ibid.,* 41). But though the calculation of possibilities is a human act and the very idea of nonbeing, destruction, annihilation is human, nevertheless the world must be so constructed that we can individualize Being into beings, perceive differences between them, choose one rather than the other. We are as determined by the facts when we make negative judgments as when we make positive, as much as but no more than. The intuition of absence is discovered when one looks for something and does not find it. With the descriptive gifts which Sartre shows in his novels he pictures for us a man going into a café to meet a friend and finding that his friend is not there. What he observes exists, but it also melts into indifference as he looks about the room and its existence fades into nonexistence. It is against this background of annihilation that the fact of the friend's absence appears as a positive, rather than negative, fact. It is this one man's personal absence which is seen in as striking a fashion as his presence would be if he were there. Millions of other people are also absent but their absence, or nonbeing, is of no importance, has no relevance to the situation involved in one's failure to find one's friend and one's success in discovering his absence. "Non-being does not occur in things through the judgment of negation; on the contrary that judgment is conditioned and supported by non-being" (*ibid.,* 46).

What have been called negative facts,[12] then, must confront us just as positive facts do. We have a direct apprehension of negation, of the nothing. It will scarcely escape anyone's attention that a nothing which can be perceived must be something. For to be perceptible would certainly seem to be something. If this is so, then Sartre's nonbeing, *le néant,* is to be distinguished from the traditional notion of nonbeing. One might imagine that being and nonbeing were simply correlative terms exhausting a universe of discourse. But it turns out that this is not the case. For Sartre points out that absence, nothingness, nonbeing may stimulate hatred, regret, and anguish (*ibid.,* 53). When a person turns out to be not what you had thought he was, when one realizes to the full the death of someone whose life was very dear, or when one fails to find that for which one was looking, one is brought up with a shock before nonbeing. It seems to reside in the bosom of that-which-is (*ibid.*, 58). Now it is no secret that if one starts with an affirmative, there is no way of defining a negation; but if one starts with a negative, one can reach an affirmative by simply negating the negative. The old slogan that two negatives make an affirmative is drummed into every English-speaking child from boyhood, but none of us has been shown how to erect this into a metaphysical principle. Sartre, however, recalls to his readers that every question is based upon a doubt, and since every doubt is based upon the possibility of nonbeing,[13] human existence itself is colored by the idea of nonbeing.

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[12] The theory of negative facts has long been disputed in contemporary philosophy. It arose, if I am not mistaken, in Meinong's *Ueber annahmen* (1902) and was adopted by such American philosophers as W. P. Montague, see his *Ways of Knowing* (1925), p. 343, and E. B. Holt in his early work, later repudiated, *The Concept of Consciousness* (1914). Cf. Bertrand Russell's *Human Knowledge, its Scope and Limits,* 1948, p. 122 where he proposes a solution to the problem.

If we may embroider upon this theme, we shall see that an animal whose life was conducted automatically, by unfailing instinct, would never have to put a question. Like a stone which exhibits constant behavior, behavior which is entirely predictable, such an animal would either do or die. No thinking, no problem-solving, no choice of alternatives would ever present themselves to it. But human beings are essentially animals who do question and have to choose. Negation becomes part and parcel of their nature by this fact alone. But Sartre will not accept the thesis that human nature is so estranged from nature itself that it is a world of illusion. If our conduct "implies" nonbeing, then nonbeing must be an essential element in the make-up of the cosmos. It is because of this basic negativity that we feel anguish.

Now anguish is an experience which all existentialists accentuate as somehow or other the heart of human nature. In Kierkegaard and Jaspers it is, above all, religious in its significance. But whether one is inclined to interpret it religiously or not, it arises when man is confronted by the necessity of choice, looks upon himself as free, realizes that he is a being who puts questions to the universe. This, as Sartre says (*ibid.*, 66), is not fear. Fear is always fear of something; anguish is anguish over nothing. It is the emotion which we feel when we realize the possibility of the void. It is thus an index to reality, a metaphysical emotion. In Kierkegaard Abraham's anguish arose as he contemplated his relation to God; in Sartre anguish arises when one contemplates reality. Who can tell whether these two phrases mean the same thing? By shifting emphasis from the denotation to the connotation of the words "God" and "Reality," one can turn an atheistic existentialism like Sartre's into a Christian or Jewish existentialism. "God" is a word which has been used to name whatever is ultimately real. Unless one can turn the metaphysical God into a person—as Royce did by making persons synthesized purposes—it is next to impossible to understand how the two Gods can become one. The religious God may give me commands which I cannot understand and which I willingly obey; the metaphysically Real may leave me absolutely free to do or not to do and yet give me no indications about what I ought to do.

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[13] "Is this the case?" being based upon the possibility of "This is not the case."

Along with the acceptance of nonbeing comes the acceptance of time. Sartre emphasizes the temporal dimension of human existence more than either Kierkegaard or Jaspers since he sees no refuge in eternity. Man is a temporal being, a process of self-development. There is no enduring individual who undergoes change from the past through the present into the future. We make our lives, creating them from moment to moment. Thus we negate our past as we create our present and negate our present as we create our future. But the present itself, as the mathematical limit between past and future, is in itself negation (*ibid.,* 165). Thus Being and Nonbeing continue their metaphysical dance and indeed the key to Sartre's type of existentialism lies in that dance. One might in fact, without more distortion than is always present in such paraphrases, say that for Sartre the creativity of negation solves the "riddle of the universe." Nonbeing negates itself and Being is born; the self negates itself and thus the past turns into the future; the person is forced to choose and negates a possibility, thus creating a reality; through anguish before a situation which gives us no information, we know ourselves and our freedom.

If this were simply a dialectical feat, it would be unworthy of discussion except as virtuosity. But the protests against Sartre which have arisen are eloquent testimony to the concreteness of his suggestions. He is a skillful dialectician to be sure, but what has impressed the western world is not his logic-chopping but the application of his philosophy to the practical problems of life. This has appeared most forcefully in his plays, novels, and essays. He has composed dramas in which the anguish of choice is revealed in a tragic atmosphere and he has shown us in his novels the process of self-creation at work. He is one of those rare philosophers who have been able to take from the past its lessons and integrate them into a radically new philosophy. He has taken over from Kierkegaard the thesis that the whole experience of living, and not simply sensory perception, must be used as the basis for philosophy, from Hegel the dialectical process, from Husserl the technique of investigating "essences." But one suspects that it was his own imagination which gave him the primordial insight which he then fortified by his reading. One also suspects that much of the opposition to his point of view comes from the burden which he puts on each man's shoulders. His philosophy permits no evasions from responsibility; we can neither turn to God nor to a determined causal order to palliate our sense of responsibility. This may be "dreadful freedom," but it rests upon the acceptance of the world as a problem to be solved in action. Most problems, those which we are given in schools, are solved by the application of ritualistic procedures, the rules of the game. The problems of life can seldom be solved in that way, for there is always the likelihood that the future will not be a repetition of the past and that improvisation will always be needed. We must act and there is no book of rules to tell us how to act.

What Sartre overlooks is the impulse to ritualize life and thinking itself and thus to force the future into the mold of the past. What we usually call tradition is precisely the dead or dying patterns of thought and behavior. Like all habitual processes, these too have their compulsive force and we project our feeling of compulsion into the world itself, transforming it into something which we call the uniformity of nature. We forget that we achieve this uniformity by adopting methods of thought which make things uniform. One of the lasting contributions of the thirteen forms of pragmatism was the emphasis which they put upon novelty and the element of uncertainty in all life. But what the pragmatists never saw to the best of my knowledge was the impossibility of being prepared to meet the unknown through procedures constructed in order to meet the known. If they had given more thought to the implications of their own theory, they would have been less optimistic.

If we close our historical study with Sartre's existentialism, it is because we believe it to be a beginning, not an end. It is hard to believe that any modern philosopher will turn his back upon time, multiplicity, freedom, the existent for eternity, unity, determinism, and essences. There is, to be sure, a pronounced revival of Thomism at the present time which emphasizes just those things that existentialism makes light of. But Thomism is philosophy in the service of religion and, unless the principle of authority takes over completely, philosophy will continue, as in the past, to justify itself on the basis of evidence and reason. An historian would, however, be a fool to prophesy. We none of us have sufficient evidence to predict the future of anything except the movement of the planets, and no one knows what hidden and apparently insignificant causes are at work to introduce a future utterly different from anything which any of us imagine at the present time. It is more prudent to ring down the curtain on what we have before us.

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